DEPARTMENT OF TRANSPORT

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CIVIL AVIATION ACT, 2009 (ACT NO 13 OF 2009)

CIVIL AVIATION REGULATIONS, 2011

The Minister of Transport has under section 155(1) of the Civil Aviation Act, 2009, (Act No. 13 of 2009) made the Regulations in the schedule hereto.

SCHEDULE

CIVIL AVIATION REGULATIONS, 2011

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SUBPART 1: DEFINITIONS AND ABBREVIATIONS

Definitions

- **1.01.1** In these regulations, any word or expression to which a meaning has been assigned in the Act shall have that meaning and, unless the context otherwise indicate –
- "ab initio", when referring to flight training, means the practical training required towards the first issue of a national or PPL, issued in terms of Part 61 or Part 62, or for the endorsement of such a licence with an additional category of aircraft, and for the purpose of regulation 91.02.3 excludes cross-country flight training;
- "ACAS current" refers to a pilot that has either undergone ACAS II initial training or ACAS II renewal training within the prescribed period;
- "ACAS cyclic training" means training conducted in accordance with an ACAS II syllabus as part of an approved training programme of which part of the tests and checks are subject to approval by the Director;
- "ACAS initial training" means training in accordance with the initial training component of an ACAS II syllabus;
- "ACAS instructor" means an appropriately rated flight instructor who is an ACAS current pilot;
- "ACAS renewal training" means training in accordance with the renewal training component of an ACAS II syllabus;
- "ACAS syllabus" means a syllabus of training in the use of ACAS II;
- "accelerate-stop distance available" means the length of the take-off run available plus the length of stopway, if such stopway is declared available and is capable of bearing the mass of the aeroplane under the prevailing operating conditions;
- "access control" means the security procedure applied to ensure that only persons authorised, authorised vehicles and authorised items carried by such persons or transported in such vehicles are allowed access into the premises or zone being controlled;

"accident" includes an occurrence associated with the operation of an aircraft which, in the case of a manned aircraft takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down, during which —

- (a) a person is fatally or seriously injured as result of
 - (i) being in the aircraft;
 - (ii) direct contact with any part of the aircraft, including parts which have become detached or are released from the aircraft; or
 - (iii) direct exposure to jet blast, rotor or propeller wake, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and flight crew; or
- (b) the aircraft sustains damage or structural failure which
 - (i) adversely affects the structural strength, performance or flight characteristics of the aircraft; and
 - (ii) would normally require major repair or replacement of the affected component, except for engine failure or damage when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennae, probes, vanes, tyres, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and hose resulting from hail or bird strike (including holes in the radome); or
- (c) the aircraft is still missing after an official search has been terminated and the wreckage has not been located; or
- (d) the aircraft is in a place where it is completely inaccessible;

"accredited medical conclusion" means the conclusion reached by one or more medical experts acceptable to the Director for the purposes of the case concerned, in consultation with flight operations or other experts as necessary;

"accredited representative" means a person designated by the Director in terms of Regulation 12.01.6;

"accuracy" in relation to GNSS, refers to the degree of conformance between the estimated, measured, or desired position or velocity of a system at a given time and its true position or velocity, usually presented as a statistical measure of system error, and is specified as predictable, repeatable and relative;

"acoustical change" means any voluntary change in type design which may increase the noise levels of the aircraft;

"active flight deck duty" means the time spent on duty on the flight deck during a sector excluding any break of not less than one hour whilst being relieved by an additional crew member;

"acts of unlawful interference" means acts or attempted acts that jeopardise the safety of civil aviation and air transport, such as –

- (a) unlawful seizure of aircraft in flight;
- (b) unlawful seizure of aircraft on the ground;
- (c) hostage-taking on board an aircraft or on aerodromes;
- (d) forcible intrusion on board an aircraft, at an airport or on the premises of an aeronautical facility;
- (e) introduction on board an aircraft or at an airport of a weapon or hazardous device or material intended for criminal purposes;
- (f) communication of false information as to jeopardize the safety of an aircraft in flight or on the ground, of passengers, crew, ground personnel or the general public, at an airport or on the premises of a civil aviation facility;
- (g) forcible intrusion of an ATS Facility;
- (h) threatening to do harm to an Air Traffic Controller or an ATS Facility;
- (i) unlawful transmissions on an ATS Frequency;
- (j) unlawful interference, electronically or physically, with an ATS Frequency;
- (k) unlawful destruction of an ATS Facility;

"additional cabin crew member" means a cabin crew member carried over and above the minimum number required by subpart 2 of Part 91;

"additional flight crew member" means a flight crew member carried over and above the minimum number required by subpart 2 of Part 91;

"adequate aerodrome" means an aerodrome licensed in terms of Part 139 or is found to be equivalent to the safety requirements prescribed in Part 139 and which meets the requirements of regulation 91.07.5 for the type of aircraft operating into it;

"adjustable-pitch propeller" means a propeller, the pitch setting of which can be conveniently changed in the course of ordinary field maintenance, but which cannot be changed when the propeller is rotating;

"advisor" means a person designated by the Director in terms of Regulation 12.01.7;

"advisory airspace" means an airspace of defined dimensions, or designated route, within which an air traffic advisory service is available;

- "advisory area" means a designated area within a flight information region where air traffic advisory services are available;
- "advisory route" means a designated route along which air traffic advisory services are available;
- "aerial work" means an aircraft operation in which an aircraft is used for specialized services as determined by the Director such as
 - (a) agricultural spraying, seeding and dusting;
 - (b) cloud spraying, seeding and dusting;
 - (c) culling;
 - (d) construction:
 - (e) aerial harvesting;
 - (f) aerial patrol, observation and survey;
 - (g) aerial advertisement, including banner towing and other towing of objects;
 - (h) search and rescue;
 - (i) parachuting;
 - (j) aerial recording by photographic or electronic means;
 - (k) fire spotting, control and fighting; and
 - (I) spraying, seeding or dusting other than for agricultural purposes and clouds;
- "aerobatic flight" means manoeuvres intentionally performed by the PIC of an aircraft and involving an abrupt change in attitude of the aircraft, an abnormal attitude or an abnormal variation in speed, not necessary for normal flight;
- "aerodrome" means an aerodrome as defined in the Act, and for the purposes of these Regulations includes a heliport;
- "aerodrome control service" means an air traffic control service provided for the control of aerodrome traffic:
- "aerodrome control tower" means an air traffic control unit established to provide an air traffic control service to aerodrome traffic;
- "aerodrome flight information service" means a flight information service provided in the area of an aerodrome;
- "aerodrome manager" means the person appointed as aerodrome manager in terms of Part 139 by the holder of an aerodrome licence;

- "aerodrome operating minima" means the limits of usability of an aerodrome for:
- (a) take-off, expressed in terms of RVR and/or visibility and, if necessary, cloud conditions;
- (b) landing in precision approach and landing operations, expressed in terms of visibility and/or RVR and DA/H as appropriate to the category of the operation;
- (c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or RVR and DA/H; and
- (d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or RVR, MDA/H and, if necessary, cloud conditions;
- "aerodrome operational area" means the movement area at an aerodrome and its associated strips and safety areas excluding restricted areas and aprons and includes any ground installation or facility provided at an aerodrome for the safety of aircraft operations;
- "aerodrome traffic" means all traffic on the maneuvering area of an aerodrome and all aircraft in, entering or leaving an aerodrome traffic circuit;
- "aerodrome traffic zone" means a defined portion of airspace at an aerodrome where aerodrome control or flight information service has been established for the protection of aerodrome traffic and is in operation as published in the IAIP and designated as an aerodrome traffic zone;
- "Aeronautical Information Circular" means circular containing information which does not qualify for the origination of a NOTAM or for inclusion in the AIP issued by the Director in terms of regulation 11.01.2;
- "Aeronautical Information Publication" means a publication containing aeronautical information of a lasting character essential to air navigation;
- "aeronautical information regulation and control" means a system aimed at advanced notification based on common effective dates, of circumstances which require significant changes in operating practices;
- "aeronautical station" means a land station in the aeronautical mobile service. In certain instances, an aeronautical station may be located, for example, on board ship or on a platform at sea:
- "aeroplane" means a power-driven heavier-than-air aircraft deriving its lift in flight mainly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight;
- "AIP Supplement" means the temporary changes to the information contained in the AIP which are published by means of special pages;

"air ambulance" means an aircraft used for the purposes of transporting a patient, or a person for whom there can be reasonable expectations that they will require medical attention during the transportation, and equipped in accordance with the provisions of Part 138:

"air ambulance operation" means air transportation of a patient, or person for whom there can be a reasonable expectation that they will require medical attention during the transportation which is operated in terms of Part 138;

"air carrier security officer" means a person referrd to in regulation 111.01.4(1);

"airborne collision avoidance system" means an aircraft system based on secondary surveillance radar (SSR) transponder signals that operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders by issuing either a traffic alert, a traffic advisory or a traffic resolution;

"airborne navigation database" refers to an electronic memory device containing information on aerodromes, navigation aids reporting points, standard instrument departures, standard instrument arrivals, instrument approaches, special-use airspace, and any other data of value to the pilot;

"air carrier" means a commercial air transport operator providing either a scheduled or a nonscheduled air service;

"aircraft" means an aircraft as defined in the Act, including its engines, propellers, rotor, components, parts, equipment, instruments, accessories and materials;

"aircraft avionics" means an electronic device, including the electrical part, for use in an aircraft, including radio, automatic flight control, and instrument systems;

"aircraft — category" means a classification of aircraft according to specified basic characteristics, e.g. aeroplane, helicopter, glider, free balloon;

"aircraft certificated for single-pilot operation" means a type of aircraft which the State of Registry has determined, during the certification process, that it can be operated safely with a minimum crew of one pilot;

"aircraft component" means any component part of an aircraft including a complete airframe or power plant and any operational or emergency equipment fitted to or provided in an aircraft;

"aircraft flight manual" means a manual, associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft;

Note – Also referred to as "aeroplane flight manual" or "helicopter flight manual".

"aircraft maintenance organisation" means an organisation designated by the Director in terms of Part 145, or by a Contracting State, to perform maintenance of aircraft or parts thereof, and operating under supervision of the appropriate authority;

"aircraft operating manual" means a manual acceptable to the State of Operator, containing normal, abnormal and emergency procedures, checklists, limitations, performance information, details of the aircraft systems and other material relevant to the operation of the aircraft as prescribed in Parts 121, 127 and 135 and may incorporate the AFM, referred to in regulation 91.03.2;

"aircraft security search" means an inspection of the exterior and interior of an aircraft to which passengers or cargo may have had access and an inspection of the cargo and baggage hold for the purposes of searching for suspicious objects, weapons, explosives or other dangerous devices, articles and substances;

"aircraft stand taxi lane" means a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only;

"aircraft type" means -

- (a) with respect to personnel licensing, all aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics;
- (b) when used in reference to the certification of aircraft, a classification of aircraft having similar design characteristics;

"aircraft variant" as used with respect to the licensing and operation of flight crew, means an aircraft of the same basic certificated type which contains modifications not resulting in significant changes of handling and/or flight characteristic, or flight crew complement, but causing significant changes to equipment and/or procedures;

"airframe" means fuselage, empennage and wings or rotors;

"air-ground radio station" means an aeronautical telecommunication station having primary responsibility for handling communications pertaining to the operation and control of aircraft in a given area;

"airline" means a commercial air transport operator providing a scheduled air service;

"air navigation infrastructure" means infrastructure including air navigation, communication and surveillance aids and air traffic control systems, provided for the movement of air traffic and where applicable, any building or structure on or to which such infrastructure or part thereof is housed or attached, and includes the premises on which such infrastructure or part thereof is situated, whether these be situated inside an aerodrome or elsewhere;

"Air Navigation Service Provider" means an organisation or body responsible for providing air traffic, navigation and associated services and infrastructure at aerodromes or in designated airspace;

"airmanship" means the consistent use of good judgment and well-developed knowledge, skills and attitudes to accomplish flight objectives;

"air operator certificate" means a certificate authorizing an operator to carry out specified commercial air transport operations;

"airport authority" in respect of an airport, means the organisation in control of such an airport and acting through the relevant airport manager, or the person in control of such an airport;

"airport security officer" means a person referred to in regulation 111.01.3(1) and appointed in terms of section 110 of the Act;

Note – Operations Specifications form part of an AOC.

"air service" means an air service as defined in section 1 of the Air Services Licensing Act, 1990 (Act No. 115 of 1990);

"air service operator" means a commercial air transport operator providing a scheduled, a non-scheduled or a general air service;

"Air Services Licensing Act" means the Air Services Licensing Act, 1990 (Act 115 of 1990);

"airship" means a power-driven lighter-than-air aircraft;

"air side" means the movement area of an aerodrome, adjacent terrain and buildings or portions thereof to which access is controlled by the aerodrome licence holder;

"air-taxiing" means the movement of a helicopter/VTOL above the surface of an aerodrome, normally in ground effect and at a ground speed normally less than 20 kt (37 km/h);

Note — The actual height may vary, and some helicopters may require air-taxiing above 25 ft (8 m) AGL to reduce ground effect turbulence or provide clearance for cargo slingloads.

"air traffic" means all aircraft in flight or operating on the maneuvering area of an aerodrome;

"air traffic advisory service" means a service provided within advisory airspace to ensure separation, in so far as practical between aircraft which are operating on IFR flight plans;

"air traffic control clearance" means an authorisation for an aircraft to proceed under conditions specified by an air traffic control unit;

Notes —

- (a) For convenience, the term "air traffic control clearance" is frequently abbreviated to "clearance" when used in appropriate contexts.
- (b) The abbreviated term "clearance" may be prefixed by the words "taxi", "take-off", "departure", "en route", "approach" or "landing" to indicate the particular portion of flight to which the air traffic control clearance relates.

"air traffic controller" means the holder of a valid air traffic service licence and valid rating which permits such holder to provide an air traffic control service;

"air traffic control instruction" means directives issued by an Air traffic Controller with the purpose of requiring a pilot to take a specific action;

"air traffic control service" means a service provided for the purpose of -

- (a) preventing collisions between aircraft or between aircraft and obstructions; and
- (b) expediting and maintaining an orderly flow of air traffic;

"air traffic control unit" means an aerodrome control tower, an approach control office or an area control centre or a combination thereof;

"air traffic control zone" means airspace of defined dimensions established for the protection of air traffic on or at an aerodrome where an air traffic control service is provided;

"air traffic service" means a service provided for the purpose of safe and efficient conduct of flight, expeditious and orderly flow of air traffic, assisting in aircraft search and rescue, and includes –

- (a) an aerodrome control service;
- (b) an approach control service;
- (c) an area control service;
- (d) a surveillance service;
- (e) a flight information service;
- (f) an aerodrome flight information service;
- (g) an air traffic advisory service; and
- (h) an alerting service;

"air traffic services airspaces" means airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified;

"air traffic service assistant" means the holder of an air traffic service licence and rating who provides –

- (a) assistant services to an air traffic controller; or
- (b) co-ordination services, clearance delivery services, flight information services or aerodrome flight information services;

"air traffic service flight plan" means specified information, relating to the intended flight or portion of a flight of an aircraft, which is provided to an ATSU;

"air traffic service inspector" means a person designated as such by the Director in terms of section 88 of the Act;

"air traffic service personnel" means air traffic controllers and air traffic service assistants;

"air traffic service reporting office" means an ATSU established for the purpose of receiving reports concerning air traffic services and flight plans submitted before the departure of an aircraft from an aerodrome:

"air traffic service route" means a division of airspace designed for ensuring the flow of air traffic as necessary for the provision of air traffic services;

Notes -

- (a) The term "ATS route" is used to mean variously, airway, advisory route, controlled or uncontrolled route, arrival or departure route, etc.
- (b) An ATS route is defined by route specifications which include an ATS route designator, the track to or from significant points (waypoints), distance between significant points, reporting requirements and, the lowest safe altitude.
- (c) The term ATS route makes reference to divisions of airspace in both controlled and uncontrolled airspace which are not always clearly defined as it may also be extended to include additional portions of airspace required to accommodate the density of air traffic using this route.

"air traffic service unit" means an air traffic control unit, flight information centre or air traffic service reporting office;

"airway" means a control area or a portion thereof established in the form of a corridor:

"airway bill" means the document referred to in regulation 23 of the Domestic Air Services Regulations, issued in terms of section 29 of the Air Services Licensing Act, No. 115 of 1990;

"airworthiness data" means any information necessary to ensure that an aircraft or aircraft component can be maintained in an airworthy condition;

"airworthiness standards" includes maintenance standards;

"airworthy" means -

- (a) when used in relation to an aircraft, that the aircraft is serviceable and meets all the requirements prescribed for the issuing of a certificate of airworthiness and such other requirements as have been prescribed for the continuing validity of such a certificate; and
- (b) when used in relation to the status of an engine, propeller or rotor, or part of an aircraft, it conforms to its approved design and is in a condition for safe operation;

"aisle" means a longitudinal passageway between seats in an aircraft;

"alerting service" means a service provided to notify and assist the appropriate organisations regarding aircraft in need of search and rescue aid and to assist such organisations as appropriate;

"all weather operations" means any take-off, en route or landing operations in IMC and operated in accordance with IFR;

"alternate aerodrome/heliport" means an aerodrome or heliport to which an aircraft may proceed when it becomes impossible or inadvisable to proceed to or to land at the aerodrome or heliport of intended landing. Alternate aerodromes/heliports include the following:

- (a) Take-off alternate. An alternate aerodrome/heliport at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.
- (b) En route alternate. An aerodrome/heliport at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route.
- (c) ETOPS en route alternate. A suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shutdown or other abnormal or emergency condition while en route in an ETOPS operation.
- (d) Destination alternate. An alternate aerodrome/heliport to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing;

Note — The aerodrome or heliport from which a flight departs may also be an en-route or a destination alternate aerodrome/heliport for that flight.

"altimetry system error" means the difference between the altitude indicated by the altimeter display, assuming a correct altimeter barometric setting, and the pressure altitude corresponding to the undisturbed ambient pressure;

"altitude" means the vertical distance of a level, a point or an object considered as a point, measured from mean sea level;

"amateur-built aircraft" means an aircraft built in terms of the provisions of Part 24, including any of its components and includes production-built aircraft from which the build standard was deviated from:

"amphibious aeroplane" means an aeroplane designed and constructed to take-off from and land on land surfaces as well as water surfaces;

"amphibious aircraft" means amphibious aeroplanes and amphibious helicopters;

"amphibious helicopter" means a helicopter equipped with wheels, skids, floats or other devices, but excluding emergency flotation equipment, enabling it to land and take-off from land sa well as water surfaces;

"appliance" means any instrument, mechanism, equipment, part, apparatus, appurtenance or accessory, including communications equipment, which is used or intended to be used in operating or controlling an aircraft, is installed in or attached to the aircraft, and is not part of an airframe, engine or propeller;

"approach and landing operation with vertical guidance" means an instrument approach and landing that utilises lateral and vertical guidance but does not meet the requirement established for precision approaches and landing operations;

"approach and landing phase helicopters" means that part of the flight from 1000 feet (300 meters) above the elevation of the final approach and take off area, if the flight is planned to exceed this height, or from the commencement of the descent in the other cases to landing or to the missed approach point;

"approach control unit" means an air traffic control unit established to provide an air traffic control service in the controlled airspace for which it is responsible, to controlled flights arriving at or departing from one or more aerodromes;

"approach control service" means an air traffic control service for arriving or departing flights in controlled airspaces;

"appropriate ATS authority" means the relevant authority designated by the Director as being responsible for providing air traffic services in the airspace concerned;

"appropriate authority" -

- (a) means any duly appointed institution, body or person in a State or territory which, on behalf of that State or territory carries out the provisions of the Convention on behalf of the state; or
- (b) if such Convention does not apply to a State or territory, means the institution, body or person in that State or territory which on behalf of the State or territory, performs the functions which are performed by an institution, body or person contemplated in paragraph (a), and which is recognised as such by the Director;

Note — Nothing in this definition is intended to preclude that the organization and its supervision be approved by more than one State.

"approved maintenance schedule" means a document compiled by an owner or operator in accordance with the provisions of these Regulations, and approved by the Director in terms of regulation 43.02.1 of Part 43, that prescribes in detail the inspections that need to be carried out in respect of an aircraft, its components, installed systems and equipment, and the intervals between such inspections;

"approved person" means a natural person who has been authorised in terms of Part 66 by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, to carry out maintenance inspections and repairs on a non-type certificated aircraft in compliance with the applicable aircraft maintenance schedule;

"approved training" means training conducted in terms of Part 141 under special curricula and supervision, approved by the Director;

- "apron" means a defined area on a land aerodrome intended to accommodate aircraft for the purpose of loading or unloading passengers or cargo, refuelling, parking or maintenance;
- "apron taxiway" means a portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron;
- "area control centre" means an ATSU established to provide an air traffic service to air traffic within the airspace for which it is responsible;
- "area control service" means an air traffic control service for controlled flights in control areas;
- "area navigation" means a method of navigation which permits aircraft operation on any desired flight path within the coverage of ground or space based navigation aids or within the limits of the capability of self contained aids, or a combination of these;
- Note Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.
- "Article 83" means the provisions of Article 83 of the Convention on International Civil Aviation, 1944 (Chicago Convention);
- "Article 83 *bis*" means the provisions of Article 83 *bis* of the Convention on International Civil Aviation, 1944 (Chicago Convention);
- "Article 83 bis Agreement" means an agreement between two Contracting States that have ratified Article 83 bis, in terms of which the State of Registry transfers all or some of its functions and duties to the State of the Operator;
- "assistant service" means a service of assisting licensed air traffic controllers to discharge air traffic service related duties;
- "ATS frequency" means an electronic radio frequency within the aviation frequency band used for the transmission and receipt of communication, navigation and surveillance data signals or voice communication;
- "ATS facility" means an, ATSU, tower, centre or any part of the communication; navigation or surveillance infrastructure set up for the provision of air traffic and associated services;
- "ATS surveillance service" means a service provided directly by means of an ATS surveillance system;
- "ATS surveillance system" is a generic term referring to ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft;
- "authority to fly" means the authority to fly issued in terms of Subpart 2 of Part 24 of the Regulations as a restricted certificate of airworthiness;

"automatic activation device" means an automatic altitude and descent-rate activated device designated to activate a parachute;

"automatic dependent surveillance — broadcast" is the means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link;

"automatic dependent surveillance — contract" is the means by which the terms of an ADS-C agreement are exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports;

Note — the abbreviated term "ADS contract" is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.

"availability" in relation to GNSS refers to an indication of the ability of the system to provide usable service within the specified coverage area and is defined as the portion of time during which –

- (a) the system is to be used for navigation; and
- (b) reliable navigation information is presented to the flight crew, autopilot or other system managing the flight of the aircraft;

"aviation recreation" means flying microlight, glider, balloon, gyroplane, hang glider, paraglider, model aircraft, light sport aeroplane, touring motor glider, parachute or involvement in aviation levents;

"aviation security training organisation" means any organisation registered in terms of the Companies Act, 2008 (Act No 71 of 2008) or the Close Corporations Act of 1984 (Act No 69 of 1984) and approved to conduct aviation security training by the appropriate authority;

"aviation training organisation" means an organisation designated by the Director in terms of Part 141 to conduct approved training;

"background check" means the checking of a person's identity and previous experience, including any criminal history as part of the assessment of an individual's suitability to implement a security control and/or for unescorted access to a security restricted area;

"balloon" means a non-power-driven lighter-than-air aircraft;

"BARO VNAV system" refers to a non-precision navigation system that presents computed vertical guidance to the pilot, associated to a specified Vertical Path Angle (VPA), nominally three degrees (3°), which is referenced to barometric altitude and which is specified as a VPA from a Reference Datum Height (RDH);

"base jumps" means a parachute descent from an object other than an aircraft;

"break" for the purposes of Part 65, means a period of responsibility-free duty time within the period of rostered operational duty, during which air traffic service personnel are released from all operational responsibilities;

"build standard" means the document package that defines the dimensions, materials and processes to be used in the construction of an aircraft, together with associated documents that show that the design complies with an established design criteria;

"cabin crew" means the collective of cabin crew members on board an aircraft:

"cabin crew member" means a crew member licensed in terms of Part 64 who performs, in the interest of safety of passengers, duties assigned by the operator or the PIC of the aircraft, but who shall not act as a flight crew member;

"captive balloon" means a balloon which is moored to the surface or to a ship, vehicle or construction on the surface:

"cargo" means any property carried on an aircraft other than mail, stores, unaccompanied or mishandled baggage;

"cargo aircraft" means any aircraft, other than a passenger aircraft, which is carrying goods or property;

"carry-on baggage" means baggage that a passenger carries with him or her on board an aircraft;

"Category A approval" when used in Part 173, means a flight procedure design approval in terms of which the holder may design, maintain, revise, amend or adapt flight procedures of the same type as the holder's rating;

"Category B approval when used in Part 173 means a flight procedure design approval in terms of which the holder may –

- (a) adapt to the conservative a flight procedure of the same type as the holder's rating, for use by South African registered aircraft operating at, or in the vicinity of an aerodrome in a foreign country;
- (b) design, maintain, revise or amend a flight procedure of the same type as the holder's rating for use by South African registered aircraft operating at, or in the vicinity of an off-shore installation located no closer than 30NM from the nearest land;

"Category I (CAT I) operation" means a precision instrument approach and landing with a decision height not lower than 200 feet (60 meters) and with either a visibility of not less than 800 meters or a RVR of not less than 550 meters;

- "Category II (CAT II) operation" means a precision instrument approach and landing with a decision height lower than 200 feet (60 meters) but not lower than 100 feet (30 meters) and a RVR of not less than 350 meters;
- "Category IIIA (CAT IIIA) operation" means a precision instrument approach and landing with a decision height lower than 100 feet (30 meters) or no decision height, and a RVR of not less than 200 meters;
- "Category IIIB (CAT IIIB) operation" means a precision instrument approach and landing with a decision height lower than 50 feet (15 meters) or no decision height, and a RVR of less than 200 meters but not less than 50 meters;
- "Category IIIC (CAT IIIC) operation" means a precision instrument approach and landing with no decision height and no RVR limitations;
- Note For precision instrument approach and landing operations, where decision height (DH) and RVR fall into different categories of operation, the instrument approach and landing operation would be conducted in accordance with the requirements of the most demanding category (e.g. an operation with a DH in the range of CAT IIIA but with an RVR in the range of CAT IIIB would be considered a CAT IIIB operation or an operation with a DH in the range of CAT II but with an RVR in the range of CAT I would be considered a CAT II operation).
- "cause" for the purpose of Part 12, means any action, omission, event, condition or any combination thereof, which leads to an accident or incident;
- "ceiling" means the height above the surface of the base of the lowest layer of cloud below 20 000 feet covering more than half the sky;
- "certificate of airworthiness" means the certificate of airworthiness referred to in Article 31 of the Convention, issued in terms of Subpart 8 of Part 21 of the Regulations, and includes an authority to fly issued in terms of Subpart 2 of Part 24;
- "certificate of approval" means a certificate issued in terms of Part 108 to a person approved to accept, store, handle and tender goods for the carriage by air;
- "certificate of fitness" means the document issued to certify the acceptance of the applicant as being regarded as medically fit for appropriate flight duties;
- "certificate of proficiency" means a certificate issued in terms of Part 108 to a natural person to certify that its holder has successfully completed the initial or refresher security training;
- "certification" means formal evaluation and confirmation by or on behalf of the appropriate authority that a person possesses the necessary competencies to perform assigned functions to an acceptable level as defined by the appropriate authority;
- "certify as airworthy (to)" means to certify that an aircraft or any part thereof complies with current airworthiness requirements;

"changeover point" means the point at which an aircraft navigating on an ATS route segment defined by reference to VHF omnidirectional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft;

Note — Changeover points are established to provide the optimum balance in respect of signal strength and quality between facilities at all levels to be used and to ensure a common source of azimuth guidance for all aircraft operating along the same portion of a route segment.

"check-in baggage" means baggage that a passenger hands in when checking in for a flight and that is supposed to be carried in a cargo compartment of the aircraft on which the passenger is travelling;

"child" means a passenger who has reached his or her second but not his or her twelfth birthday;

"circling approach" means an extension of an instrument approach procedure which provides for visual circling of the aerodrome prior to landing;

"Class A airspace" means that portion of the airspace classified in terms of regulation 172.02.2;

"Class A GNSS equipment" means GNSS equipment incorporating both the GNSS sensor and navigation capability, including RAIM:

- (a) Class A1 en-route, terminal and non-precision approach other than localiser, navigation capability;
- (b) Class A2 en-route and terminal navigation capability only;

"Class A helicopter-load combination" means a helicopter-load combination in which the external load cannot move freely, or be jettisoned, and which does not extend below the landing gear;

"Class B airspace" means that portion of the airspace classified in terms of regulation 172.02.2;

"Class B GNSS equipment" means GNSS equipment consisting of a GNSS sensor, which provides data to an integrated navigation system:

- (a) Class B1 en-route, terminal and non-precision approach, other than localiser, navigation capability;
- (b) Class B2 en-route, and terminal navigation capability only, providing RAIM;

- (c) Class B3 en-route, terminal and non-precision approach, other than localiser, which equipment requires the integrated navigation system to provide a level of GPS integrity equivalent to that provided by RAIM;
- (d) Class B4 en-route and terminal navigation capability only, which equipment requires the integrated navigation system to provide a level of GPS integrity equivalent to that provided by RAIM;
- "Class B helicopter-load combination" means a helicopter-load combination in which the external load is capable of being jettisoned and which is lifted free of land or water during the helicopter external-load operation;
- "Class C airspace" means that portion of the airspace classified as such in terms of Regulation 172.02.2;
- "Class C GNSS equipment" means GNSS equipment consisting of a GNSS sensor that provides data to an integrated navigation system that in turn provides guidance to an autopilot or flight director in order to reduce Flight Technical Error (FTE):
 - (a) Class C1 en-route, terminal and non-precision approach, other than localiser, navigation capability, providing RAIM;
 - (b) Class C2 en-route and terminal navigation capability only, providing RAIM;
 - (c) Class C3 en -route, terminal and non-precision approach, other than localiser, which equipment requires the integrated navigation system to provide a level of GPS integrity equivalent to that provided by RAIM;
 - (d) Class C4 en-route and terminal capability only, which equipment requires the integrated navigation system to provide a level of GPS integrity equivalent to that provided by RAIM;
- "Class C helicopter-load combination" means a helicopter-load combination in which the external load is capable of being jettisoned and which remains in contact with land or water during the helicopter external-load operation;
- **"Class D airspace"** means that portion of the airspace classified as such in terms of Regulation 172.02.2;
- "Class D helicopter-load combination" means a helicopter-load combination, other than a Class A, Class B or Class C helicopter-load combination, which has been approved by the Director for a specific helicopter external-load operation;
- "Class E airspace" means that portion of the airspace classified as such in terms of Regulation 172.02.2;
- "Class F airspace" means that portion of the airspace classified as such in terms of Regulation 172.02.2;

"Class G airspace" means that portion of the airspace classified as such in terms of Regulation 172.02.2;

"Class I product" means a complete aircraft, aircraft engine or propeller, which -

- (a) has been type certificated in accordance with the provisions of these Regulations and for which the South African Specifications or type certificate data sheets have been issued; or
- (b) is identical to a type certificated product referred to in paragraph (a) in all respects except as in otherwise acceptable to the appropriate authority of the importing State;

"Class II product" means -

- (a) a major component of a Class I product, including wings, fuselages, empennage assemblies, landing gears, power transmissions, control surfaces and installed equipment, the failure of which will jeopardise the safety of a Class I product; or
- (b) a part, material or appliance, approved and manufactured under the TSO system as prescribed in subpart 12 of Part 21;

"Class III product" means any part or component which is not a Class I or a Class II product;

"clearance delivery service" means a service specifically dedicated to the issuing of air traffic control clearances to pilots on behalf of one or more ATSUs;

"clearance limit" means the point to which an aircraft or vehicle is granted an air traffic control clearance;

"close corporation" means a close corporation as defined in section 1 of the Close Corporations Act, 1984 (Act No. 69 of 1984);

"cloudbreak/breakcloud procedure" means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, to a point at which visual contact with the surface may be made and from which a landing or circling approach can be completed and thereafter, if a landing is not completed, to a position at which holding or en-route obstacle criteria apply;

"cloud ceiling" means the height above the ground or water of the base of the lowest layer of cloud situated below 20 000 feet and covering more than half the sky;

"co-authority dispatch" means the shared responsibility, between the PIC and the flight dispatcher in a Type A or B operational control system, for decisions respecting the OFP prior to acceptance of the OFP by the PIC;

"commercial air transport helicopter" means a helicopter engaged in a commercial air transport operation;

"commercial air transport operation" means an air service as defined in section 1 of the Air Services Licensing Act, 1990 (Act No. 115 of 1990), including –

- (a) the classes of air service referred to in Regulation 2 of the Domestic Air Services Regulations, 1991; and
 - (b) the classes of international air services referred to in Regulation 2 of the International Air Services Regulations, 1994;

"commercial air transport operator" means the provider of a commercial air transport operation;

"communication failure procedure" means a procedure as published in the AIP;

"company" means a company as defined in section 1 of the Companies Act, 2008;

"competency" means a combination of skills, knowledge and attitudes required to perform a task to the prescribed standard;

"competency element" means an action that constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome;

"competency unit" means a discrete function consisting of a number of competency elements;

"composite structures or components" means aircraft components which are manufactured of fibres embedded in a polymer matrix;

"condition" means, a condition -

- (a) which is clear, reasonable, practically executable and appropriate to the relevant matter;
- (b) which is calculated to achieve the particular objectives of the relevant empowering provision, read with the Act and these Regulations and any other relevant and appropriate law, and, in general, the promotion of civil aviation safety and the public interest; and
- (c) which is to be reduced to writing, delivered to the other person, body or institution in a manner ensuring proper receipt thereof, and recorded by the functionary imposing the condition in an appropriate manner;

"configuration" means a particular combination of the positions of the moveable elements which affect the aerodynamic characteristics of the aircraft;

"configuration deviation list" means a list established by the organization responsible for the type design with the approval of the State of Design which identifies those external parts of an aircraft type that may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction;

"congested area" means in relation to a city, town or settlement, any area that is substantially used for residential, commercial or recreational purposes;

"congested hostile environment" means with respect to helicopter operations, a hostile environment within a congested area;

"consignee" means the person whose name appears on the airway bill as the party to whom the goods are to be delivered by the air carrier;

"consignment" means one or more pieces of goods accepted by the air carrier from one shipper at one time and at one address, receipted for in one lot and moving on one airway bill to one consignee at one destination;

"consignor" means the person whose name appears on the airway bill as the party contracting with the air carrier(s) for carriage of goods;

"contaminated runway" means a runway of which more than 25 percent of the runway surface area within the required length and width being used is covered with –

- (a) surface water more than three millimetres deep;
- (b) slush or loose snow, equivalent to more than three millimetres of water;
- (c) snow which has been compressed into a solid mass which resists further compression and will hold together or break into lumps if picked up; or
- (d) ice, including wet ice;

"continuing airworthiness" means the set of processes by which all aircraft comply with the applicable airworthiness requirements and remain in a condition for safe operation throughout their operating life;

"continuity" in relation to GNSS refers to the capability of the total system, comprising all elements necessary to maintain aircraft position within the defined airspace, to perform its function without non-scheduled interruptions during the intended operation;

"Contracting State" means a State that is a signatory to the Convention; "control area" means a controlled airspace extending upwards from a specified height above the surface without an upper limit, unless an upper limit is specified as published in an AIP, AIC or NOTAM and designated as a control area;

"controlled aerodrome" means an aerodrome at which air traffic control service is provided to aerodrome traffic;

"controlled airspace" means an airspace of defined dimensions within which an air traffic control service is provided to IFR flights and to VFR flights in accordance with the airspace classification as prescribed in Regulation 172.02.2;

- "controlled flight" means any flight which is subject to an air traffic control clearance;
- "controller-pilot data link communications" means a means of communication between controller and pilot, using data link for ATC communications;
- "control system" means a system by which the flight path, attitude or propulsive force of an aircraft is changed, including the flight, engine and propeller controls, the related system controls and the associated operating mechanisms;
- "control zone" means as controlled airspace extending upwards from the surface to a specified upper limit as published in an AIP, AIC or NOTAM;
- "conventionally controlled microlight aeroplane" means an aeroplane that is primarily controlled by manipulating its primary flight control surfaces by conventional methods excluding weight-shift control and of which these maximum take-off mass and other classification parameters are defined in document SA-CATS 24 as technical standard 24.01.2.(5.2);
- "conveyance by air" means conveyance in an aircraft in flight;
- "co-ordination service" means a service of co-ordinating the discharge of air traffic service related duties by air traffic service personnel;
- "co-pilot" means a licensed, type-rated pilot required by these Regulations to serve in any piloting capacity other than as PIC, but excluding a pilot who is on board the aircraft for the purpose of receiving flight instruction;
- "co-responsibility dispatch" means the shared responsibility, between the PIC and the flight dispatcher in a Type A or B operational control system, for decisions respecting the OFP prior to acceptance of the OFP by the PIC;
- "corporate aviation operation" means the non-commercial operation or use of aircraft by a company for the carriage of passengers or goods as an aid to the conduct of company business, flown by a professional pilot(s) employed to fly the aircraft;
- "courier service" means an operation whereby cargo tendered by one or more consignors are transported as the baggage of a courier passenger on board a scheduled air transport service under normal passenger hold baggage documentation;
- "credit" means recognition of alternate means of prior qualifications;
- "crew member" means a person assigned by an operator to carry out duties onboard an aircraft during a flight, that are essential for the safe operation of the aircraft and the successful completion of the flight, and include task specialists who have been assigned in-flight duties related to a specialized use of the aircraft and have been informed of, and accepted the associated risks thereof;

- "critical phases of flight" includes all ground operations involving taxi, take-off, climb to cruise up to 10 000 feet and approach from cruise below 10 000 feet;
- "critical surfaces" with respect to operation in icing conditions, means the wings, control surfaces, propellers, horizontal stabilizers, vertical stabilizers or any other stabilizing surface of an aircraft and, in the case of an aircraft that has rear-mounted engines, includes the upper surface of its fuselage;
- "cross country flight" when used in connection with the acquisition of flight experience required for a pilot licence, means a flight between a point of departure and a point of landing not less than 20 nautical miles apart following a pre-planned route using standard navigation procedures;
- "cruise climb" means an aeroplane cruising technique resulting in a net increase in altitude as the aeroplane mass decreases;
- "cruise relief pilot" means a flight crew member who is assigned to perform pilot tasks during cruise flight, to allow the PIC or a co-pilot to obtain planned rest;
- "cruising level" means a flight level maintained during a significant portion of a flight;
- "cull" includes the selection, counting and herding of game and livestock;
- "current flight plan" means the air traffic service flight plan, including changes, if any, brought about by subsequent clearances;
- "damp lease" means an operating lease in terms of which the aircraft is leased with a partial crew;
- "damp runway" means a runway of which the surface is not dry and on which the moisture does not give the runway a shiny appearance;
- "danger area" means an area of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times;
- "dangerous goods" means articles or substances which are capable of posing significant risk to health, safety or property when conveyed by air and which are shown in the list of dangerous goods in the International Civil Aviation Organisation Technical Instructions for the Safe Carriage of Dangerous Goods or which are classified according to those Instructions;
- "dangerous goods accident" means an accident associated with and related to the conveyance of dangerous goods by air;
- "dangerous goods incident" means an incident, other than a dangerous goods accident, associated with and related to the conveyance of dangerous goods by air, and for the purposes of Part 92, includes injury to a person, property damage, fire, breakage, spillage, leakage of fluid

or radiation or other evidence that the integrity of the packaging has not been maintained or which seriously jeopardises the aircraft or its occupants;

"data link communications" means a form of communication intended for the exchange of messages via a data link;

"date of application" when used in connection with the issuing, renewal or re-issuing of a licence, certificate or rating, means the date on which the application is received in the prescribed form by the Director;

"day" means the period of time from 15 minutes before sunrise to 15 minutes after sunset, sunrise and sunset being as given in the publication "Times of Sunrise, Sunset and Local Apparent Noon of the South African Astronomical Observatory" or in a similar publication issued by a recognised astronomical observatory;

"day off" for the purposes of an air operator's approved flight time and duty period programme, means a period of not less than 24 consecutive hours free of all duty on behalf of, or contact by the operator. A single day off shall include two local nights. Consecutive days off shall include a further local night for each consecutive day off. A rest period may be included as part of a day off:

Note – Contact by the operator may be effected by non-intrusive means such as electronic mail but not by any method that could cause a disturbance or disruption to sleep or other rest.

"decision altitude/height" means a specified altitude or height in a precision approach or approach with vertical guidance at which a missed approach shall be initiated if the required visual reference to continue the approach has not been established;

Notes —

- (a) Decision altitude (DA) is referenced to mean sea level and decision height (DH) is referenced to the threshold elevation.
- (b) The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In Category III operations with a decision height the required visual reference is that specified for the particular procedure and operation.
- (c) For convenience where both expressions are used they may be written in the form "decision altitude/height" and abbreviated "DA/H".

"defined point" with respect to helicopter operations means -

(a) in relation to a defined point after take-off, the point, within the take-off and initial climb phase, before which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required; and

(b) in relation to a defined point before landing, the point, within the approach and landing phase, after which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required;

"designated aviation medical examiner" means an aviation medical examiner designated by the Director in terms of regulation 67.00.4;

"designated examiner" means an authorised person, designated as such, approved to conduct skill tests and proficiency checks on persons other than pilots in terms of the delegation referred to in section 88 of the Act:

"designated flight examiner" means an authorised person, designated as such, approved to conduct skill tests and proficiency checks on pilots and such other persons as may be specified in terms of the delegation referred to in section 88 of the Act;

"diplomatic bag" means a package intended for the head of a diplomatic mission or a member of the staff of a diplomatic mission that bears visible marks of its character and contains only documents or articles intended for official use:

"disabled passenger" means a passenger who is physically or mentally challenged due to illness, injury, congenital malfunction or other temporary or permanent incapacity or disability;

"disembarkation" means the leaving of an aircraft after landing, except by flight crew or passengers continuing on the next stage of the same through-flight;

"dry lease" means an operating lease in terms of which only the aircraft is leased without crew and the lessee has legal possession of the aircraft;

"dry operating mass" means the total mass of the aircraft ready for a specific type of operation, excluding all usable fuel and traffic load, and includes –

- (a) flight crew members and flight crew member baggage;
- (b) catering and removable passenger service equipment; and
- (c) portable water and lavatory chemicals;

"dry runway" means a dry runway which is neither wet nor contaminated, and includes those paved runways which have been specially prepared with grooves or porous pavement and maintained to retain "effectively dry" braking action even when moisture is present;

"dual instruction time" in terms of flight training shall mean flight time during which a person is receiving flight instruction from a properly authorized pilot on board the aircraft;

"duty" means any task that flight or cabin crew members are required by the operator to perform, including, for example, flight duty, administrative work, training, positioning and standby when it is likely to induce fatigue;

"duty period" means any continuous period throughout which either a crew member flies in any aeroplane, whether as a crew member or as a passenger, at the behest of his or her employer, or otherwise carries out a required duty in the course of his or her employment. It includes any flight duty period, positioning, ground or flight training, office duties, flight watch, home reserve and standby duty;

"electronic flight bag" means an electronic information management and display system intended primarily for flight crew or cabin crew functions that were traditionally accomplished using paper references (e.g., navigation charts, operating manuals, performance calculations);

"elevated heliport" means a heliport located on a raised structure on land;

"embarkation" means the boarding of an aircraft for the purpose of commencing a flight, except by such flight crew or passengers who have embarked on a previous stage of the same through-flight;

"emergency flotation equipment" means equipment carried by helicopters which, when activated, enables the helicopter to land and float on water;

"emergency locator transmitter" means equipment which broadcast distinctive signals on designated frequencies and, depending on application, may either sense a crash and operate automatically or may be manually activated. An ELT may be any of the following:

- (a) Automatic fixed ELT (ELT(AF)). An automatically activated ELT which is permanently attached to an aircraft;
- (b) Automatic portable ELT (ELT(AP)). An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft;
- (c) Automatic deployable ELT (ELT(AD)). An ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases, also by hydrostatic sensors. Manual deployment is also provided; or
- (d) Survival ELT (ELT(S)). An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors;

"emergency parachute" means a parachute assembly designed and intended to be used by persons in an emergency;

"emission charge" means any voluntary change in type of design of the aircraft or engine which may increase fuel venting or engine emission;

"enforcement officer" means an authorised officer, inspector or authorised person;

"en-route alternate aerodrome" means an aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en-route;

"en-route phase" means that part of the flight from the end of the take-off and initial climb phase to the commencement of the approach and landing phase;

"en route safe altitude" means an altitude which will ensure a separation height of at least -

- (a) 1 000 feet above the highest terrain or obstacle where the height of such terrain or obstacle does not exceed 5 000 feet above sea level within five nautical miles of the aircraft in flight; or
- (b) 2 000 feet above the highest terrain or obstacle located within five nautical miles of the aircraft in flight where the height of such terrain or obstacle exceeds 5 000 feet above sea level;

"ensure" in relation to any person, body or institution and in respect of any matter, activity, process, condition, requirement or other person, or anything else, means to take, considering the nature and context of the provision requiring the ensuring, and any other appropriate legal provisions, in good faith, all necessary, and all reasonably incidental and practically executable preliminary, precedent and precautionary steps in order to be able and prepared to take, and afterwards to take, all necessary and reasonably incidental and practically executable steps, to substantially achieve the clear particular objectives of the provision requiring the ensuring and, in general, the promotion of civil aviation safety and the public interest;

"error", as used in the context of operating an aircraft, means an action or inaction by the flight crew that leads to deviations from organisational or flight crew intentions or expectations;

"error management" means the process of detecting and responding to errors, as defined, with countermeasures that reduce or eliminate the consequences of errors, and mitigate the probability of further errors or undesired aircraft conditions;

"estimated off-block time" means the estimated time at which the aircraft will commence movement associated with departure;

"estimated time of arrival" -

- (a) in respect of IFR flights, means the time at which it is estimated that the aircraft will arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced or, if no navigation aid is associated with the aerodrome, the time at which the aircraft will arrive over the aerodrome; and
- (b) in respect of VFR flights, means the time at which it is estimated that the aircraft will arrive over the aerodrome;

"ETOPS en-route alternate" means a suitable and appropriate alternate aerodrome at which an aeroplane would be able to land after experiencing an engine shutdown or other abnormal or emergency condition while en-route in an ETOPS operation;

"examiner" means variously a DFE, Designated Examiner or Official Flight Examiner;

"expected approach time" means the time at which ATC expects that an arriving aircraft, following a delay, will leave the holding fix to complete its approach for a landing;

"express air cargo" means particular time-sensitive shipments, requiring reliable, time-measured transport using simple documentation or an air waybill;

"extended flight over water" means a flight over water at a specified distance or time away from land suitable for making an emergency landing that necessitates the carriage of specified life-saving equipment;

Notes -

- (a) See the respective Part for specified time, distance and life-saving equipment requirements; and
- (b) Also known as 'long range over-water flight' or 'extended over-water flight'.

"extended range operations" means flights conducted over a route that contains a point further than one hour flying time at the approved one-engine inoperative cruise speed, under standard conditions in still air, from an adequate aerodrome;

"extended range operations with twin-engine aircraft" means flights conducted with a twinengine aircraft, over a route that contains a point further than one hour flying time at the approved one-engine inoperative cruise speed, under standard conditions in still air, from an adequate aerodrome;

"facility" for the purpose of Part 172, means any facility used for providing an air traffic control service:

"fatigue" means a physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness and/or physical activity that can impair a crew member's alertness and ability to safely operate an aircraft or perform safety related duties;

"filed flight plan" means the flight plan as filed with an ATS unit by the pilot or a designated representative, without any subsequent changes;

"final approach" with respect to IFR operations means that part of an instrument approach procedure which commences at the specified final approach fix, or where such fix is not specified;

- (a) At the end of the last procedure turn, baseturn or inbound of a racetrack procedure, if specified; or
- (b) At the point of interception of the last track specified in the approach procedure; and ends at a point in the vicinity of an aerodrome from which
 - (i) A landing can be made; or
 - (ii) A missed approach procedure is initiated;

"final approach and take-off area" means a defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the final approach and take-off area is to be used by performance Class 1 helicopters, the defined area includes the rejected take-off area available;

"final approach fix" means the fix from which the final approach (IFR) to an aerodrome is executed and which identifies the beginning of the final approach segment;

"financial or capital lease" means an arrangement in terms of which the aircraft is leased from a bank or other financial institution (lessor), whereby the aircraft gives the outward appearance of ownership by the operator (lessee), and is usually registered in the State of the Operator;

"finding" means a conclusion by the operator's audit personnel that demonstrates non-conformity with a specific standard;

"first aid" means first aid appropriate to the type of aircraft, and includes -

- (a) the recognition and treatment of food poisoning;
- (b) the recognition and treatment of contamination of the skin and eyes by aviation fuel and other fluids;
- (c) the recognition and treatment of hypoxia and hyperventilation;
- (d) first aid associated with survival training, appropriate to the routes to be operated; and
- (e) other related aeromedical aspects;

"flight" means from the moment an aircraft commences its take-off until the moment it completes its next landing;

"flight crew member" means a crew member licensed in terms of Part 61 or Part 63 of the regulations and charged with duties essential during flight time;

"flight data analysis" means the process of analysing recorded flight data in order to improve the safety of flight operations;

"flight deck" means the area in an aircraft in which is located the flight crew member stations from which the operation of the aircraft is controlled and observer seats, if installed, and in which access is normally restricted to flight crew members only;

"flight duty period" means any time during which a person operates in an aircraft as a member of its flight crew and it starts when the flight crew member is required by an operator to report for a flight, and finishes at on-chocks or engines off, on the final sector for that flight crew member;

"flight information centre" means an ATSU established to provide flight information services and alerting services;

"flight information region" means an airspace of defined dimensions within which flight information services and alerting services are provided;

"flight information service" means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights;

"flight instructor" means a pilot who is the holder of the appropriate flight instructor rating;

"flight level" means a surface of constant atmospheric pressure, expressed as a number of hundreds of feet, relating to a specific pressure datum of 1 013,2 hectopascals and is separated from other such surfaces by specific pressure intervals;

"flight manual" means a manual, attached to the certificate of airworthiness, containing the limitations within which an aircraft is to be considered airworthy, and the instructions and information necessary to the flight crew members for the safe operation of the aircraft;

"flight operations officer" means a person designated and certified by the operator to engage in the control and supervision of flight operations who is qualified to support, brief and/or assist the PIC in the safe conduct of the flight;

"flight plan" means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

"flight procedures trainer": See 'Flight Simulator Training Device';

"flight recorder" means any type of recorder installed in an aircraft for the purpose of complementing accident/incident investigation;

"flight release" means the formal authorization for the PIC to proceed with a flight in accordance with an OFP signed by both the PIC and the person responsible for operational control over the flight;

"flight safety documentation system" means a set of inter-related documentation established by the operator, compiling and organizing information necessary for safe flight and ground operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual;

"flight simulator training device" means any one of the following three types of apparatus in which flight conditions are simulated on the ground:

- (a) a flight simulator, which provides an accurate representation of the flight deck of a particular aircraft type, to the extent that the mechanical, electrical, electronic, etc. aircraft systems, control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;
- (b) a flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control functions of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

(c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions:

"flight time" means -

- (a) for the operation of aeroplanes, the total time from the moment an aeroplane first moves for the purposes of taking off until the moment it finally comes to rest at the end of the flight;
 - Note Flight time as here defined is synonymous with the term "block to block" time or "chock to chock" time in general usage which is measured from the time an aeroplane first moves for the purpose of taking off until it finally stops at the end of the flight.
- (b) for the operation of helicopters, the total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight and the rotor blades are stopped; and
- (c) for the operation of gliders, the total time occupied in flight, whether being towed or not, from the moment the glider first moves for the purpose of taking off until the moment it comes to rest at the end of the flight;

"flight watch" means -

- (a) in respect of flight time and duty period regulations, a period of time during which a flight crew member is required to check with the operator at specified times as to whether his or her services as a flight crew member will be required and, should this be the case, will report for duty at the time then specified; and
- (b) in respect of operational control of commercial air transport aircraft, the process by which a flight operations officer provides flight following service to a flight, and provides any operational information as may be requested by the PIC or deemed necessary by the flight operations officer. Meteorological information provided to the PIC by the flight operations officer may include analysis or interpretation;

"flight watch system" means an operator's equipment, facilities and personnel which enable that operator to exercise operational control over a flight in progress via direct and timely communications with that flight;

"follow-on GNSS equipment" refers to equipment that has already received an initial airworthiness certification:

"foreign air operator" means any operator, other than a South African air operator, which undertakes on a scheduled or charter basis, whether directly or indirectly, by lease or any other arrangement, to engage in commercial air transport operations within the borders or airspace of South Africa;

"foreign authority" means the authority of a foreign State that issues the air operator certificate and oversees the operations of its air operators;

- "foreign state aircraft" means any aircraft owned or operated by any State other than the Republic of South Africa;
- "formation flight" means two or more aircraft flying in the same general direction at a distance not exceeding 1 km (0.5 NM) laterally and longitudinally and 30 m (100 ft) vertically from each other;
- "full flight simulator" means a full size replica of a specific type or make, model and series aeroplane flight deck, including the assemblage of all equipment and computer programmes necessary to represent the aeroplane in ground and flight operations, a visual system providing an out-of-the-flight deck view and a force cuing motion system;
- "general aviation operation" means an aircraft operation other than a commercial air transport, corporate aviation, air ambulance or aerial work operation;
- "glider" means a heavier-than-air aircraft, other than a hang-glider, that is supported in flight by the dynamic reaction of the air against its fixed, lifting surfaces, and whereof free flight does not depend on an engine;
- "GNSS" means a worldwide position and time determination system that includes one or more satellite constellations, aircraft receivers and system integrity monitoring, augmented as necessary to support the RNP for the intended operation;
- "GNSS incident" refers to an incident involving but not limited to, the malfunctioning of equipment, signals or human performance in the operation of a GNSS system;
- "GNSS sensor" refers to a single GNSS unit used for navigation within a flight management system;
- "ground handling" means any service, other than air traffic services, required by an aircraft on arrival at, and departure from an aerodrome;
- "ground visibility" means the visibility at an aerodrome as reported by an accredited observer or by automatic systems;
- "gyroglider" means a non-power-driven heavier-than-air aircraft, supported in flight by the reactions of the air on one or more rotors which rotates freely on substantially vertical axes;
- "gyroplane" means a power-driven heavier-than-air aircraft, supported in flight by the reactions of the air on one or more rotors which rotates freely on substantially vertical axes;
- "handicapped passenger" means a passenger who is physically or mentally handicapped due to illness, injury, congenital malfunction or other temporary or permanent incapacity or disability;
- **"hang-glider"** means a non-power-driven heavier-than-air aircraft capable of being carried, foot launched, and landed solely by the energy and use of the pilot's legs, having
 - (a) a rigid primary structure with pilot weight shift as the primary method of control; or

(b) a rigid primary structure with movable aerodynamic surfaces as the primary method of control in at least two axes.

and for the purposes of Parts 24, 94 and 96 includes a powered hang-glider;

- "hang-glider aero tow rating or endorsement" means a rating issued to the pilot of a hangglider qualifying him or her to be aero-tugged;
- "hazard" means any act, omission, event or condition or a combination thereof that could lead to or result in an accident or incident:
- "heading" means the direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid);
- "head-up display" means a display system that presents flight information into the pilot's forward external field of view;
- "heavier-than-air aircraft" means an aircraft deriving its lift in flight mainly from aerodynamic forces;

"height" means -

- (a) the vertical distance of a level, a point or an object considered as a point, measured from a specific datum;
- (b) the vertical dimension of an object;
- "helicopter" means a heavier-than-air aircraft supported in flight mainly by the reactions of the air on one or more power-driven rotors on substantially vertical axes;
- "helicopter crewman" means a person, other than a member of the flight crew, who is charged with duties by the operator essential to the helicopter operation when engaged in winching or external-load operations or who acts as a loadmaster;
- "helicopter-load combination" means the combination of a helicopter and an external-load, including the external-load attaching means;
- "helicopter sling load" means the externally carriage, lowering or picking up of a load, cargo, or passengers by means of a bucket, net, harness, sling or stretcher, suspended beneath the helicopter;
- "helicopter winching" means the external lowering or picking-up of a load, cargo or person by means of a hoist fitted to the side of a helicopter;
- "helideck" means a heliport located on a floating or fixed off-shore structure;

"heliport" means an aerodrome and any defined area or a structure, intended or designed to be used either wholly or partly for the landing, departure and surface movement of helicopters;

"heliport operating minima" means the limits of usability of a heliport for -

- (a) take-off, expressed in terms of RVR and/or visibility and, if necessary, cloud conditions;
- (b) landing in precision approach and landing operations, expressed in terms of visibility and/or RVR and DA/H as appropriate to the category of the operation;
- (c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or RVR and DA/H; and
- (d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or RVR, MDA/H and, if necessary, cloud conditions;

"hostile environment" with respect to helicopter operations, means an environment in which -

- (a) a safe forced landing cannot be accomplished because the surface and surrounding environment are inadequate;
- (b) the helicopter occupants cannot be adequately protected from the elements;
- (c) search and rescue response/capability is not provided consistent with anticipated exposure; or
- (d) there is an unacceptable risk of endangering persons or property on the ground;

"human factors principles" means the principles which apply to aeronautical design, certification, training, operations and maintenance of aircraft, and which seek safe interface between the human and other system components by proper consideration to human performance;

"human performance" means the capabilities and limitations of a human being that have an impact on the safety and efficiency of aeronautical operations and services;

"ICAO flight plan form" refers to the International Civil Aviation Organisation flight plan form (MOT/AC 1565);

"imported" in the context of Part 24 means brought into the Republic by any means for the purpose of having the aircraft put on the South African Civil Aircraft Register;

"incident" means an occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of aircraft operations;

"individual" for the purpose of Part 185 includes a natural person, a partnership and a sole proprietorship;

"infant" means a person who has not reached his or her second birthday;

"initial approach fix" means the fix determined in terms of instrument approach procedures which identifies the beginning of the initial approach segment;

"initial approach segment" means that segment of an instrument approach procedure between the initial approach fix and the intermediate approach fix, or where applicable, the final approach fix or point;

"initial test flight" means the first flight of an aircraft for the purpose of the initial validation of an experimental prototype or first of type or amateur built aircraft to be registered on the South African aircraft register;

"inspection" means that part of the maintenance by which an aircraft or aircraft component is being examined to establish conformity with an approved standard;

"instructions for safe operation and continued airworthiness" means instructions prepared by the holder of a type certificate for a product, comprising descriptive data and accomplishment instructions;

"instrument approach and landing operation" means an instrument and landing operation classified as CAT I, CAT II and CAT IIIA, CAT IIIB, and CAT IIIC, non-precision or precision approach and landing operations;

"instrument approach procedure" means a series of predetermined manoeuvres by reference to flight instruments with specified protection from obstacles from the initial approach fix, or where applicable, from the beginning of a defined arrival route, to a point from which a landing can be completed and thereafter, if a landing is not completed, to a position at which holding or en route obstacle criteria apply. Instrument approach procedures are classified as follows —

- (a) non-precision approach procedure. An instrument approach procedure which utilizes lateral guidance but does not utilize vertical guidance;
- (b) approach procedure with vertical guidance. An instrument approach procedure which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations; or
- (c) precision approach procedure. An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation;

Note — Lateral and vertical guidance refers to the guidance provided either by –

- (a) a ground-or space-based navigation aid; or
- (b) computer-generated navigation data.

"instrument flight time" means time during which the aircraft is piloted solely by reference to instruments and without external reference points, whether under actual or simulated flight conditions:

"instrument ground time" means time during which a pilot is practicing on the ground simulated instrument flight in a FSTD approved by the Director;

"instrument meteorological conditions" means atmospheric conditions expressed in terms of visibility, distance from cloud, or ceiling, less than the minima prescribed for VFR flight in regulations 91.06.21 and 91.06.22;

"instrument time" means instrument flight time or instrument ground time, as defined;

"integrated training", as used in the context of flight training, means training, conducted under special curricula and supervision approved by a Contracting State, that, in the case of flight crew members, is conducted within an approved training organisation, and allows for reduced flight time experience for the issuance of a licence;

"integrity" in relation to GNSS, refers to the ability of a system to provide timely warnings to users when the system performance has exceeded predetermined safe limitations and should not be used for navigation;

"Integrated Aeronautical Information Package" means a package which consists of -

- (a) an AIP including an amendment service;
- (b) supplements to the AIP;
- (c) NOTAM;
- (d) AIC; and
- (e) checklists and summaries:

"International Air Services Act" means the International Air Services Act, 1993 (Act No. 60 of 1993);

"international flight" means a flight which passes through the airspace over the territory of more than one State;

"International Regulations for Preventing Collisions at Sea" means the International Regulations for Preventing Collisions at Sea made under the Convention on the International Regulations for Preventing Collisions at Sea, signed in London on 20 October 1972, set out in the Third Schedule to the Merchant Shipping Act, 1951 (Act No. 57 of 1951);

"investigation" in relation to accidents and incidents, means a process conducted for the purpose of accident prevention and includes the gathering and evaluation of information, the drawing of conclusions, including the determination of the cause, causes, probable cause or probable causes of an accident or the underlying cause or causes and/or contributing factors leading to an incident and, when appropriate, the making of recommendations in connections with aviation safety;

"investigator" means a person designated as such by the Director in terms of Regulation 12.01.4;

"investigator-in-charge" means a person designated by the Director on the basis of his or her qualifications and charged with the responsibility for the organisation, conduct and control of and the reporting on the investigation of an accident or incident;

"kite" means a non-power-driven, heavier-than-air aircraft, other than a glider or hang-glider, deriving its lift in flight mainly from aerodynamic reactions on the surfaces which remain fixed under given conditions of flight, and for the purpose of these Regulations also means a line-controlled kite;

"known cargo" means a consignment from a known consignor or a regulated agent to which the appropriate security controls, prescribed by Part 108, have been applied; and includes a consignment of unknown cargo which have been subjected to appropriate security controls;

"known consignor" means the originator of goods for carriage by air:

- (a) who has an established business with a regulated agent on the basis of agreed security criteria as prescribed in Part 108;
- (b) who complies with the criteria prescribed in Part 108 for a known consignor;

"known consignor validator" means a person or entity designated by the Director in terms of Regulation 108.05.7;

"landing area" means that part of a movement area intended for the landing or take-off of aircraft;

"landing decision point" means the point used in determining landing performance from which, a power unit failure having been recognised at this point, the landing may be safely continued or a baulked landing initiated;

"landing distance available" means the length of the runway which is declared available and suitable for the ground run of an aeroplane landing;

"large aircraft" means an aircraft of a maximum certificated take-off mass of over 5 700 kg; Note – Includes aeroplanes and helicopters.

"lateral navigation" refers to azimuth navigation without positive vertical guidance associated with non-precision approach procedures or en-route;

"lease", when used in reference to an aircraft, means a contractual arrangement between a lessor and a lessee whereby a properly licensed air service operator gains commercial control of an entire aircraft without transfer of ownership, and which may be in the form of any of the following:

- (a) financial or capital lease;
- (b) operating lease
 - (i) dry lease;
 - (ii) damp lease;

- (iii) wet lease; or
- (iv) sub-charter, as defined;

"lessee" with reference to an aircraft lease means the party to which the aircraft is leased;

"lessor" with reference to an aircraft lease means the party from which or whom the aircraft is leased:

"letter of TSO design approval" means a design approval for a foreign-manufactured article which complies with a specific TSO;

"level" means a generic term relating to the vertical position of an aircraft in flight and meaning variously, height, altitude or flight level;

"licensing authority" means the authority designated by a Contracting State as responsible for the licensing of personnel;

"lighter-than-air aircraft" means any aircraft supported mainly by its buoyancy in the air;

"light sport aeroplane" means an aeroplane of which the maximum take-off mass and other classification parameters are defined in Document SA-CATS 24 as technical standard 24.01.2.0.1;

"likely" in the context of the medical provisions in Part 67, means with a probability of occurring that is unacceptable to the medical assessor;

"limit loads" means the maximum loads assumed to occur in the anticipated aircraft operating conditions;

"line flight" means a commercial flight carried out under normal operations by the holder of a licence issued in terms of the Air Services Licensing Act or the International Air Services Act;

"line flying" means flying done by flight crew under normal commercial operations;

"load" means the design strength requirements, prescribed for an aircraft in terms of its limit load and ultimate load;

"low-visibility procedures" means procedures applied at an aerodrome for the purpose of ensuring safe operations during low visibility operations;

"low-visibility take-off" means a take-off where the RVR is less than 400 metres;

"Mach number" means the ratio of true airspeed to the speed of sound;

"mail" means dispatches of correspondence and other objects tendered by or intended for delivery to a postal company;

"main parachute" means a parachute which is designed and intended to be used as the primary parachute for a parachute descent;

"maintenance" means the performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair;

"maintenance control manual" means a document, compiled by an owner or operator in accordance with the provisions of these Regulations that defines the organisation and procedures established for ensuring the sustained airworthiness of the aircraft to which it applies, its components, installed systems and equipment";

"maintenance programme" means a document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies;

"maintenance release" means a document which contains a certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, either in accordance with the approved data and the procedures described in the maintenance organization's procedures manual or under an equivalent system;

"major change" means any change in the type design which is extensive enough to require a substantially complete investigation to determine compliance with the type certification basis;

"major modification" means a modification not listed in the aircraft, aircraft engine, or propeller specifications –

- (a) which may appreciably affect weight, balance, structural strength, performance, powerplant operations, flight characteristics, or other qualities affecting airworthiness; or
- (b) which is not done according to accepted practices or cannot be done by elementary operations;

"major repair" means a repair -

- (a) which, if improperly done, may appreciably affect weight, balance, structural strength, performance, powerplant operation, flight characteristics, or other qualities affecting airworthiness; or
- (b) which is not done according to accepted practices or cannot be done by elementary operations;

"mandatory periodic inspection" means an inspection prescribed in Regulation 43.02.8;

"manoeuvring area" means that part of an aerodrome used for take-off, landing (including the runway strips) and taxiing of aircraft, excluding an apron;

"manual of procedure" means a document endorsed by the head of an organisation which details the organisation's structure and management responsibilities, scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems;

"Master" means the Master as defined in section 1 of the Administration of Estates Act, 1965 (Act No. 66 of 1965):

"master minimum equipment list" means a list compiled for a particular aircraft type by the manufacturer of the aircraft with the approval of the appropriate authority of the State of Manufacture containing items, one or more of which is permitted to be unserviceable at the commencement of a flight;

"maximum approved passenger seating configuration" means the maximum passenger seating capacity of an aircraft, excluding pilot seats, cockpit seats or flight deck seats as applicable, used by the operator in a commercial air transport operation, approved by the Director and specified in the operations manual referred to in regulation 121.04.2, 127.04.2 or 135.04.2;

Note – Also known as 'maximum certificated passenger capacity' or 'maximum certificated passenger configuration'.

"maximum certificated mass" means the maximum permissible mass shown in the AFM or other document associated with the certificate of airworthiness at which an aircraft may commence its take-off under standard atmospheric conditions at sea level;

"medically compromised passenger" means a person who is physically or mentally compromised due to illness, injury, congenital malfunction or other temporary or permanent incapacity or disability, who cannot assist himself or herself, and is not likely to require medical care, but needs to be accompanied by a person to provide comfort during the flight and to assist in any emergency flight procedure;

"medical assessment" means the evidence issued by a Contracting State that the licence holder meets specific requirements of medical fitness;

"medical assessor" means a physician, qualified and experienced in the practice of aviation medicine, who evaluates medical reports submitted to the Authority by medical examiners;

"medical examiner" means a physician, with training in aviation medicine and practical knowledge and experience of the aviation environment, who is designated by the Director to conduct medical examinations of fitness of applicants for licences or ratings for which medical requirements are prescribed, and in the context of these Regulations, refers to the aviation medical examiner designated by the Director in terms of Part 67;

"medical personnel" means any aviation health care provider registered with an appropriate authority who is assigned to provide medical care to a patient from the time of boarding an aircraft until completion of disembarkation and who is knowledgeable of aviation stresses and their effect on the human body and on medical life support and equipment used in the transport of patients;

"medical service provider" means the person, associated with an air ambulance operator for the purposes of taking responsibility for the medical aspects of the operation and who is subject to the legislation administered by the Department of Health; "meteorological information" means any meteorological report, analysis or forecast in support of aviation, and any other statement in support of aviation relating to existing or expected meteorological conditions;

"meteorological service" means any of the following services which provide meteorological information in support of aviation –

- (a) climatology service, which is a service for the development and supply of climatological information for a specific place or airspace;
- (b) forecast service, which is a service for the supply of forecast meteorological information for a specific area or portion of airspace;
- (c) information dissemination service, which is a service for the collection and dissemination of meteorological information;
- (d) meteorological briefing service, which is a service for the supply of written and oral meteorological information on existing and expected meteorological conditions;
- (e) meteorological reporting service, which is a service for the supply of routine meteorological reports; and
- (f) meteorological watch service, which is a service for maintaining a watch over meteorological conditions affecting aircraft operations in a specific area;

"micro-light aeroplane" means an aeroplane of which the minimum flying speed and the maximum take-off mass have been restricted for classification purposes. The values of these restrictions are defined in Document SA-CATS 24;

"minimum descent altitude/height" means a specified altitude or height in a non-precision approach or circling approach below which descent must not be made without required visual reference;

Notes —

- (a) Minimum descent altitude is referenced to mean sea level and minimum descent height is referenced to the aerodrome elevation or to the threshold elevation if that is more than 7 ft (2 m) below the aerodrome elevation. A minimum descent height for a circling approach is referenced to the aerodrome elevation.
- (b) The required visual reference means that section of the visual aids or of the approach area which should have been in view for sufficient time for the pilot to have made an assessment of the aircraft position and rate of change of position, in relation to the desired flight path. In the case of a circling approach the required visual reference is the runway environment.

"minimum equipment list" means a list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type;

"minor change" means any change in type design which has no appreciable effect on the weight, balance, structural strength, reliability, operational characteristics or other characteristics affecting the airworthiness of the product;

"minor modification" means a modification other than a major modification;

"missed approach point" means that point, in an instrument approach procedure at or before which the prescribed missed approach procedure shall be initiated, in order to ensure that the minimum obstacle clearance is not infringed:

"missed approach procedure" means the procedure to be followed if the approach to landing cannot be continued;

"model aircraft" means a heavier-than-air aircraft of limited dimensions, with or without a propulsion device, unable to carry a human being and to be used for competition, sport or recreational purposes rather than unmanned aeronautical vehicles (UAV) developed for commercial or governmental, scientific, research or military purposes, and not exceeding the specifications as set by the Federation Aeronautique Internationale as listed in Document SA-CATS 24:

"movement area" means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron;

"national pilot licence" means a pilot licence or rating issued in terms of Part 62 of the Regulations and is not recognised by the International Civil Aviation Organisation and may therefore only be utilised within the borders of the Republic, unless its use is specifically authorised by the responsible authority for other foreign airspace;

"nautical mile" means the length equal to 1 852 metres exactly;

"navigation specification" means a set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications –

- (a) RNP specification. A navigation specification based on RNAV that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH; and
- (b) RNAV specification. A navigation specification based on RNAV that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1;

"newly overhauled" when used to describe a product, means that the product has not been operated or placed in service, except for functional testing, since having been overhauled,

inspected and approved for release to service in accordance with the provisions of these Regulations;

"night" means the period from 15 minutes after sunset to 15 minutes before sunrise, sunset and sunrise being as given in the publication "Times of Sunrise, Sunset and Local Apparent Noon of the South African Astronomical Observatory" or a similar publication issued by a recognised astronomical observatory;

"night duty" means a period of not less than 4 hours between 20h00 and 06h00 of the next day;

"non-congested hostile environment" with respect to helicopter operations, means an hostile environment outside a congested area;

"non-hostile environment" with respect to helicopter operations, means an environment in which –

- (a) a safe forced landing can be accomplished because the surface and surrounding environment are adequate;
- (b) the helicopter occupants can be adequately protected from the elements;
- (c) search and rescue response/capability is provided consistent with anticipated exposure; and
- (d) the assessed risk of endangering persons or property on the ground is acceptable;

Note — Those parts of a congested area satisfying the above requirements are considered non-hostile.

"non-populous area" in terms of Part 137, means an area on the surface of the earth other than a populous area;

"non-precision approach and landing" means an instrument approach and landing operation that utilises lateral guidance but does not utilise vertical guidance;

"non-type certificated aircraft" means any aircraft that does not qualify for the issue of a certificate of airworthiness in terms of Part 21 and shall include any type certificated aircraft that has been scrapped, of which the original identification plate should have to be removed and returned to the applicable aviation authority and is rebuild as a full-scale replica;

"Notice to Airmen" means a notice containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations, distributed by means of telecommunication by or with the authority of the Director;

"obstacle clearance altitude or height" means the lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria; Note — Obstacle clearance altitude is referenced to mean sea level and obstacle clearance height is referenced to the threshold elevation or in the case of non-precision approaches to the aerodrome elevation or the threshold elevation if that is more than 7 ft (2 m) below the aerodrome elevation. An obstacle clearance height for a circling approach is referenced to the aerodrome elevation.

"official examiner" means a person, designated by the Director, who may carry out the duties and functions of a DFE, as specifically authorised by the Director for a period of not more than 90 days;

"offshore operations" with respect to helicopter operations, means operations which routinely have a substantial proportion of the flight conducted over sea areas to or from offshore locations. Such operations include, but are not limited to, support of offshore oil, gas and mineral exploitation and sea-pilot transfer;

"operating base" or "main base of operations" means the location from which operational control is exercised:

Note — An operating base is normally the location where personnel involved in the operation of the aeroplane work and the records associated with the operation are located. An operating base has a degree of permanency beyond that of a regular point of call.

"on the job training instructor" when referring to air traffic controller training shall mean an air traffic controller who is the holder of the appropriate instructor rating issued under Part 65;

"operating certificate" means an operating certificate issued by the Director authorising an operator of a commercial air transport aircraft to carry out specified air transport operations;

"operating lease" means an arrangement in terms of which an air service operator (lessee) obtains the use of an aircraft owned or operated by another party (lessor) for a defined period;

"operational control" in respect of a commercial air transport operation means the exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight as laid down in the operations manual of the operator;

"operational flight plan" means the operator's plan for the safe conduct of the flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned;

"operations in performance Class 1" means helicopter operations with performance such that, in the event of a critical power-unit failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, unless the failure occurs prior to reaching the take-off decision point or after passing the landing decision point, in which cases the helicopter must be able to land within the rejected take-off or landing area;

Note – Refer to regulation 91.08.3 for helicopter performance classifications.

"operations in performance Class 2" means helicopter operations with performance such that, in the event of critical power-unit failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which cases a forced landing may be required;

Note – Refer to regulation 91.08.3 for helicopter performance classifications.

"operations in performance Class 3" means helicopter operations with performance such that, in the event of a power-unit failure at any time during the flight, a forced landing will be required;

"operations manual" means a manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties as prescribed in Parts 121, 127 and 135 of the regulations;

"operations personnel" for the purposes of Part 138, means personnel assigned to or directly involved in ground and flight emergency medical service operations;

"operations specifications" means the authorizations, conditions and limitations forming part of the AOC and subject to the conditions specified therein or the operations manual;

"operator" means a natural or artificial entity, holding a valid licence and operating certificate or equivalent thereof, authorising such person to conduct scheduled or non-scheduled or general air services, and may be referred to as 'airline', 'air carrier', 'air service operator', or commercial air transport operator', as defined;

"operator's maintenance control manual" means the document which describes the operator's procedures that are necessary to ensure that all scheduled and unscheduled maintenance are performed as required by the provisions of Parts 121, 127 and 135, and 'maintenance schedule' has a corresponding meaning;

"organisation" for the purpose of Part 185 excludes a natural person, a partnership and a sole proprietorship;

"overpack" means an enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage;

"owner" in relation to an aircraft, means the person in whose name the aircraft is registered, and includes –

- (a) any person who is or has been acting as agent in the Republic for a foreign owner, or any person by whom the aircraft is hired at the time;
- (b) a person who has the right of possession of an aircraft for 14 days or longer;
- (c) for the purpose of Part 91, an operator of an aircraft engaged in non-commercial operations;

"package" means the complete product of the packaging consisting of the packaging and its contents prepared for conveyance;

- "packaging" means a receptacle and any other component or material necessary for the receptacle to perform its containment function and to ensure compliance with the requirements and standards as prescribed in Document SA-CATS 92;
- "packing" means the process whereby an article or substance is enveloped in a wrapping, enclosed in a packaging or otherwise secured;
- "parachute" means any device comprising a flexible drag, or drag and lift, surface from which load is suspended by shroud lines capable of controlled deployment from a packed condition;
- "parachute assembly" means any parachute and its associated harness and container system, and other attached equipment for use by a person;
- "parachute descent" means any descent made from an aircraft by a person with the prior intention of deploying a parachute;
- "parachute drop zone" means a designated area of airspace in which parachute descents are intended to be made;
- "parachute landing area" means an area of ground or water onto which parachute landings are intended to be made;
- "parachute technician" means a person who certifies parachute equipment;
- "paraglider" means a non-power-driven, heavier-than-air aircraft without a rigid primary structure, comprising a flexible drag, or drag and ram-air type lift surface, from which the pilot and passengers are suspended by shroud lines, which is foot-launched, and of which the descent is partly controlled by the pilot by means of two steering lines, and which for the purposes of Parts 24, 94 and 96 includes a paratrike and a powered paraglider;
- "paratrike" means a paraglider with a large ram-air type lift surface and fixed undercarriage;
- "passenger" means a person, other than a crew member, who is carried on board an aircraft;
- "passenger aircraft" means an aircraft which carries any person other than a flight crew member, an operator's employee in an official capacity, an authorised officer or a person accompanying a consignment or other cargo;
- "performance based navigation" means area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace;
- Note Performance requirements are expressed in navigation specifications in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.

"performance criteria" means a simple, evaluative statement on the required outcome of the competency element and a description of the criteria used to judge if the required level of performance has been achieved;

"period of operational duty" means the period during which an air traffic controller is actually exercising the privileges of the air traffic service licence;

"pilot (to)" means to manipulate the flight controls of an aircraft during flight time and may also be referred to as 'pilot flying' (PF);

"pilot flying" means a pilot assigned as a required flight crew member who is manipulating the controls of an aircraft during flight time;

"pilot-in-command" means the pilot designated by the operator as being in command and charged with the safe conduct of a flight, without regard to whether or not he or she is manipulating the controls;

"pilot-in-command under supervision" means a co-pilot performing the duties and functions of a PIC under the supervision of the PIC in accordance with a method of supervision acceptable to the Authority;

"policy" means a document or a statement containing the organization's position or stance regarding a specific issue;

"populous area" in terms of Part 137, means an area on the surface of the earth where -

- (a) if an aeroplane is required to execute a forced landing, the aeroplane would not be able to glide safely clear of any human presence or building; or
- (b) if a helicopter is required to autorotate, such helicopter would not be able to land clear of any human presence or building.

"postal company" means the company incorporated in terms of section 3(1) of the Postal Office Act, 1958 (Act 44 of 1958) or an equivalent authority of a Contracting State;

"post maintenance test flight" means a flight for the purposes of investigative test flying to confirm the release to service following regular maintenance;

"power-assisted glider" means a glider with a maximum all-up mass of not more than 850 kg, fitted with a retractable engine that is used mainly for the purpose of launch and climb and short periods of free flight;

"powered glider" means an aircraft equipped with one or more engines which has, with the engine or engines not operating, the performance characteristics of a glider;

"powered hang-glider" means a hang-glider, fitted with an engine attached either to the structure or to the pilot, and which also maybe fitted with a detachable undercarriage, to support its launch and climb;

"powered paraglider" means a paraglider, fitted with an engine attached to the pilot to assist in its launch and in short local powered flights, and which may have a fixed or detachable undercarriage:

"precision approach" means an instrument approach for landing in which precision azimuth guidance and precision glide path guidance are provided in accordance with the minima prescribed for the category of operation. Precision approaches are categorized as follows –

- (a) Category I (CAT I) operation. A precision instrument approach and landing with a decision height not lower than 200 ft (60 m) and with either a visibility not less than 800 m or a RVR not less than 550 m;
- (b) Category II (CAT II) operation. A precision instrument approach and landing with a decision height lower than 200 ft (60 m), but not lower than 100 ft (30 m), and a RVR not less than 300 m;
- (c) Category IIIA (CAT IIIA) operation. A precision instrument approach and landing with
 - (i) a decision height lower than 100 ft (30 m) or no decision height; and
 - (ii) a RVR not less than 175 m;
- (d) Category IIIB (CAT IIIB) operation. A precision instrument approach and landing with -
 - (i) a decision height lower than 50 ft (15 m) or no decision height; and
 - (ii) a RVR less than 175 m but not less than 50 m; and
- (e) Category IIIC (CAT IIIC) operation. A precision instrument approach and landing with no decision height and no RVR limitations;

Note — Where decision height (DH) and RVR fall into different categories of operation, the instrument approach and landing operation would be conducted in accordance with the requirements of the most demanding category (e.g. an operation with a DH in the range of CAT IIIA but with an RVR in the range of CAT IIIB would be considered a CAT IIIB operation or an operation with a DH in the range of CAT II but with an RVR in the range of CAT I would be considered a CAT II operation)

"precision approach and landing operation" means a precision instrument approach and landing that utilizes precision lateral and vertical guidance with minima as determined by the approach and landing phase, and in respect of helicopters means that part of the flight from 300 m (1 000 feet) above the elevation of the final approach and take-off area , if the flight is planned to exceed this height, or from the commencement of the descent in the other cases, to landing or to the balked landing point;

"preliminary report" means the communication used for the prompt dissemination of data which is obtained in early stages of an investigation;

"prescribed loads" in respect of an aircraft means limit loads, unless otherwise stated;

"pressure altitude" means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the standard atmosphere;

"primary-means navigation system" refers to an air navigation system, approved by the Director for a given operation or phase of flight, that meets accuracy and integrity requirements, but does not necessarily meet full availability and continuity requirements. Safety in a primary-

means navigation system is *inter alia* achieved by limiting flights to specific time periods and through appropriate procedural restrictions;

"problematic use of psychoactive substances" means the use or abuse of, or dependence on, one or more psychoactive substances by aviation personnel in a way that:

- (a) constitutes a potential physical or psychological hazard to the user or endangers the lives, health or welfare of others; or
 - (b) causes or complicates an occupational, social, mental or physical problem or disorder:

"procedural control" means a term to indicate that information derived from an ATS surveillance system is not required for the provision of an air traffic control service;

"procedural separation" means the separation used when providing procedural control as defined in the document ATS Standards and Procedures Manual;

"process" means a set of interrelated or interacted activities which transform inputs into outputs;

"process release certificate or report" means a certificate or report which verifies compliance with a specific process standard;

"product" means an aircraft, aircraft engine or propeller, and includes the classes of products or types of aircraft referred to in Part 21;

"production-built aircraft" means an amateur-built aircraft, of which the prototype has been constructed and approved in terms of Part 24, and which is made available by the constructor to others either as a fully-assembled non-type certificated aircraft;

"prohibited area" means any area declared as such in terms of regulation 91.06.19;

"proper shipping name" means the name to be used to describe a particular article or substance in all shipping documents and notifications and, where applicable, on packagings;

"pro-tem investigator" means a person designated as such by the Director in terms of regulation 12.01.5;

"proving flight" means -

- (a) in terms of Part 24 of these Regulations, any flight conducted in terms of a Proving flight authority for the purpose of qualifying for the consideration and issuance of an Authority to fly; and
- (b) in terms of an application for or amendment to an AOC, means a flight undertaken to affirm the operator's ability to provide adequate control and supervision of its flight operations over the routes proposed to be flown or the capability of the aircraft to operate on those routes;

"proving flight authority" means the authorisation to commence flight trials as are necessary for development purposes, for the compilation of handling and operational data and, generally, for the preparation of the aircraft for the tests necessary for the issue of an authority to fly;

"psychoactive substances" means any substance with psychotropic effects, excluding caffeine and tobacco, but which includes the following:

- (a) narcotic analgesics such as opiates;
- (b) illicit substances such as cannabis and cocaine;
- (c) sedative hypnotics;
- (d) hallucinogens;
- (e) central nervous system depressants; and
- (f) central nervous system stimulants, including volatile solvents and alcohol;

"public air transport service" means an air service that has as its main purpose the transport of passengers, cargo or mail;

"quality" means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs;

"quality assurance" means all the planned and systematic actions necessary to provide adequate confidence that all organizational activities satisfy given standards and requirements, including the ones specified by the relevant organisation in relevant manuals;

"quality audit" means a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives;

"quality inspection" means that part of quality management involving quality control;

"quality manager" means the manager responsible for the monitoring function and for requesting remedial action and is responsible directly to the accountable manager;

"quality manual" means the document containing the relevant information pertaining to an organization's quality assurance system;

"quality of training" means the outcome of the training that meets stated or implied needs within the framework of set standards:

"quality system" means documented organisational procedures and policies; internal audit of these policies and procedures; management review; and recommendation for quality improvement;

"quick-donning mask" means an oxygen mask that can be secured by a person using one hand on the person's face within five seconds, and that provides an immediate supply of oxygen;

Note – Refer to technical standard 91.04.18 for additional requirements associated with quick-donning masks.

"radio navigation service" means a service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigational aids;

"radio site" means a site for the location of communication, navigation, surveillance or meteorological ground equipment, or a collection thereof, for the purpose of aviation safety;

"radiotelephony" means a form of radio communication primarily intended for the exchange of information in the form of speech;

"RAIM warning" refers to a warning that the integrity of the navigation position solution derived from GNSS satellites signals may be unreliable;

"rapid exit taxiway" means a taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways and thereby minimising runway occupancy times;

"rated air traffic controller" means an air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised;

"rating" means an authorisation entered on or associated with a licence and forming part of such licence, stating special conditions, privileges or limitations relating to such licence;

"rating assessment examiner" means a rating assessment examiner who has been designated in terms of the provisions of regulation 65.01.9;

"Receiver Autonomous Integrity Monitoring" refers to a technique whereby the airborne GNSS system determines the integrity of the GNSS navigation signals, using only GNSS signals or GNSS signals augmented with altitude. This determination is achieved by a consistency check among redundant pseudo-range measurements;

"receptacle" means any container used for or capable of receiving and holding substances or articles, including any means of closing;

"Reduced Vertical Separation Minima" means the reduced separation above flight level 290 of aircraft to a 1000 feet in the opposite direction and 2000 feet in the same direction;

"regulated agent" means a commercial air transport operator, a freight forwarder, cargo handling agent, postal agency and any other person approved by the Director as a regulated agent involved in the carriage of cargo by air;

"rejected take-off distance required" means the horizontal distance required from the start of the take-off to the point where the helicopter comes to a full stop following a power unit failure and rejection of the take-off at the take-off decision point;

[&]quot;release to service" -

- (a) in relation to an aircraft, means -
 - (i) in respect of scheduled maintenance, the issuing of a certificate of release to service; and
 - (ii) in respect of line maintenance, the appropriate entry in the technical logbook or flight folio, as the case may be; and
- (b) in relation to an aircraft component, means the issuing of
 - (i) a serviceable label; or
 - (ii) a certificate relating to the maintenance of an aircraft;

"rendering (a licence) valid" means the action taken by a Contracting State, as an alternative to issuing its own licence, in accepting a licence issued by any other Contracting State as the equivalent of its own licence;

"repetitive flight plan" means a flight plan related to a series of frequently recurring, regularly operated individual flights with identical basic features, submitted by an operator for retention and repetitive use by ATS units;

"reporting point" means a specified geographical location in relation to which the position of an aircraft can be reported;

"repair" means the restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the type certificate for the respective type, after it has been damaged or subjected to wear;

"required communication performance" means a statement of the performance requirements for operational communication in support of specific ATM functions;

"required communication performance type" means a label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity, availability and integrity;

"required navigation performance" means a statement of the navigation performance necessary for operation within a defined airspace;

"RNP Type" means a containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 percent of the total flying time;

"rescue service" means a service a defined in section 1 of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), a medical service or any other related service;

"reserve parachute" means an emergency parachute assembly designed and approved to be used as the secondary parachute after the failure of a main parachute;

"resident of the Republic" means a person who has his or her ordinary residence in the Republic and who is a South African citizen or is in the possession of a permit for permanent residence in the Republic issued in terms of sections 26 and 27 of the Immigration Act, 2002 (Act No.13 of 2002);

"rest period" means a continuous and defined period of time, subsequent to and/or prior to duty, during which crew members are free of all duties;

"restricted area" means -

- (a) any airspace as defined in regulation 91.06.20 of the Regulations;
- (b) any area on an aerodrome or heliport defined as such by the aerodrome or heliport licence holder; or
- (c) the area as defined in section 1 of the Act;

"restricted category" means a category for special purposes operations;

"RNAV/BARO VNAV procedures" refers to non-precision instrument approach procedure which utilises RNAV for lateral guidance and a computed, barometrically referenced glide path for vertical navigation providing a vertical glide path reference on a cockpit display and which is promulgated with a DA/H – for minima determination;

"RNAV specification" means a navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1;

"RNP specification" means a navigation specification based on area navigation that includes the requirements for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH;

"RNP type" means a containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 percent of the total flight time;

"rocket" means an airborne vehicle propelled by ejected expanding gases generated in its engines from self contained propellants and not dependent on the intake of outside substances and it includes any part that becomes separated during operation;

"rotorcraft" means a power-driven heavier-than-air aircraft supported in flight by the reactions of the air on one or more rotors;

"runway" means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aeroplanes;

"runway-holding position" means a designated position intended to protect a runway, an obstacle limitation surface, or an ILS/ MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower;

Note — In radiotelephony phraseologies, the expression "holding point" is used to designate the runway-holding position.

"runway incursion" means any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for landing and take-off of aircraft;

"runway visual range" means the runway visual range over which the pilot of an aeroplane on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line;

"RVSM airspace" means the airspace between flight level 290 and flight level 410;

"RVSM approval certificate" means a certificate to show compliance for aircraft and flight crew to operate in RVSM airspace;

"safety" means the freedom from risk of bodily injury or death and the freedom from risk of loss or damage to property;

"safety management system" means a systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures;

"safety pilot" in terms of Part 61 and Part 91 means a pilot whose sole purpose during flight time is to maintain a visual lookout for threats to an aircraft during simulated instrument flight and to monitor the aircraft's engine and navigation instruments to ensure exceedences do not occur;

"safety programme" means an integrated set of regulations and activities aimed at improving safety;

"safety recommendation" means a proposal of an investigator-in-charge based on information derived from an investigation and made with the intention of preventing accidents or incidents, and which in no case has the purpose of creating a presumption of blame or liability for an accident or incident. In addition to safety recommendations arising from accident and incident investigations, safety recommendations may result from diverse sources, including safety studies:

"scheduled public air transport service" means a public air transport service in connection with which flights are open to use by members of the public and are undertaken –

- (a) between the same two or more points or are of such a slight variation from the same two or more points that each flight can reasonably be regarded as being between the same two or more points; and
- (b) according to a published timetable or with such a degree of regularity and frequency that they constitute a recognisable systematic series;

- "scheduled public international air service" means a scheduled international air service as defined in regulation 1 of the International Air Service Regulation, 1994;
- "screening" means the application of technical or other means that are intended to detect weapons, explosives, incendiary devices or other devices that may be used to commit an unlawful act that could endanger the safety of an aircraft or its crew and passengers;
- "seaplane" means an aeroplane designed and constructed to take off from and land on water surfaces only;
- "seat" includes any area occupied by a passenger, excluding the area occupied by the baggage of such passenger, inside an aircraft;
- "second-in-command" means a licensed pilot serving in a piloting capacity other than as PIC, who is designated as second-in-command, but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction;
- "sector" includes take-off, en-route flight time and landing, but excludes circuit operations;
- "security" means a combination of measures and human and material resources intended to safeguard international civil aviation against acts of unlawful interference;
- "security control" is a means by which the introduction of weapons, explosives or other dangerous devices which may be utilised to commit an act of unlawful interference can be prevented;
- "security inspection" means an examination of the implementation of or compliance with the relevant security requirements by an airline, airport, or other entity involved in security;
- "security restricted area" means those areas of the airside of an airport, which are identified as priority risk areas where in addition to access control, other security controls are applied. Such areas will normally include, *inter alia*, all commercial aviation passenger departure areas between the screening checkpoint and the aircraft, the ramp, baggage make-up areas, including those where aircraft are being brought into service and screened baggage and cargo are present, cargo sheds, mail centres, airside catering and aircraft cleaning premises;
- "security survey" means an evaluation of security needs including the identification of vulnerabilities which could be exploited to carry out an act of unlawful interference, and the recommendation of corrective actions;
- "security test" means a covert or overt trial of an aviation security measure which simulates an attempt to commit an unlawful act;
- "Selcal watch" means a selective calling system to effect communication with aircraft by the use of a specific code which is detected by apparatus in the aircraft and "Selcal call sign" has a corresponding meaning;

"self-launching glider" means a glider with a maximum all-up mass of not more than 850 kilograms, fitted with an engine that is used solely for the purpose of launch and climb and not for the sustenance of free flight;

"series of flights" means consecutive flights that:

- (a) begin and end within a period of 24 hours; and
- (b) are all conducted by the same PIC;

"serious incident" means an incident involving circumstances indicating that there was a high probability of an accident and is associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time it comes to rest at the end of the flight and the primary propulsion system is shut down;

"serious injury" means an injury which -

- (a) requires hospitalisation for more than 48 hours, within seven days from the date on which the injury was sustained;
- (b) results in a fracture of any bone (except simple fractures of fingers, toes or nose);
- (c) involves lacerations which cause severe haemorrhage, or nerve, muscle or tendon damage;
- (d) involves injury to any internal organ;
- (e) involves second or third degree burns or any burns affecting more than five percent of the surface of the body; or
- (f) involves verified exposure to infectious or toxic substances or injurious radiation;

"serviceable" means, when used in relation to an aircraft, that the aircraft has been maintained and inspected in accordance with the requirements of the approved maintenance schedule and that all adjustments and rectifications found to be necessary, have been satisfactorily made:

"shift" with respect to air traffic controlling, means the period between the actual commencement and the actual end of a period of duty during which an air traffic controller exercises, or may be called upon to exercise, the privileges of the rating at the traffic service unit for which such rating is validated, and includes breaks and time spent on duties including training, aerodrome inspection, administration, flight information service and any extension of duty;

"shift cycle" means a consecutive 28 day period;

"shipper" means any person who prepares or offers a package or overpack of goods for conveyance by air;

"SIGMET information" means information issued by a meteorological watch office concerning the occurrence or expected occurrence or specified weather en-route phenomena which may affect the safety of aircraft operations; "signal area" means an area on an aerodrome used for the display of ground signals;

"simulator": See "flight simulator training device";

"skills test" means a test carried out for the purpose of issuing or reissuing or renewing a pilot licence or rating;

"sole means navigation system" refers to a navigation system, approved by the Director for a given operation or phase of flight, that allows the aircraft to meet, for that operation or phase of flight, the four navigation system performance requirements: accuracy, integrity, availability, and continuity;

"South African registered aircraft" means an aircraft which is registered in terms of regulation 47.00.6;

"special flight permit" means a permit issued in the place of an authority to fly, or where an authority to fly has lapsed for purposes including, but not limited to, ferry, delivery, demonstration or transfer flights, to a destination for the purposes of repairs, maintenance, inspections or as may be considered necessary for special purposes;

"special purposes operations" includes -

- (a) agricultural spraying, seeding and dusting;
- (b) cloud spraying, seeding and dusting;
- (c) culling;
- (d) aerial patrol, observation and survey;
- (e) advertising;
- (f) aerial recording by photographic or electronic means;
- (g) fire spotting, control and fighting; and
- (h) spraying, seeding or dusting other than for agricultural purposes and clouds;

"special rules area" means airspace other than restricted airspace where special non-standard rules are applied in order to promote safety, efficiency and orderliness outside of controlled airspace;

"special VFR flight" means a VFR flight cleared by air traffic control to fly within a control zone under meteorological conditions below the visual meteorological conditions;

"standard category" means a category for normal, transport, utility and commuter operations, including acrobatic, emergency medical service, flying training, semi-acrobatic, helicopter external-load and manned free balloon operations;

"standby duty" for the purposes of an air operator's approved flight time and duty period programme, means a period of time during which a crew member is required to remain at a specified location in order to be available to report for flight duty on notice at the discretion of the operator;

- "state aircraft" means aircraft used in military, customs and police services;
- "State of Design" means the State which has authority over the organisation responsible for the type design of an aircraft;
- "State of Manufacture" means the State which has authority over the organisation responsible for the final assembly of an aircraft;
- "State of Occurrence" means the state in the territory of which an accident or incident occurs;
- "State of Registry" means the State on whose register an aircraft is entered;
- "State of the Operator" means the State in which the principal place of business of an operator of an aircraft is located or, if there is no such place of business, the State where the operator of the aircraft has permanent residence;
- "stores" means articles of a readily consumable nature for use or sale on board an aircraft during flight, including commissary supplies;
- "student parachutist" means a person who is on the first level of training of an approved aviation recreation organisation;
- "student-pilot-in-command": See "pilot-in-command-under-supervision";
- "student pilot-in-command instrument time" means flight time during which a flight instructor will only observe the student acting as PIC without influencing or controlling the flight of the aircraft;
- "sub-charter" means a wet lease-in by an air service operator (the lessee) from an air service operator in his, her or its own right (the lessor) on short notice and for a period not exceeding five consecutive days;
- "sub-lease" when used in reference to an aircraft lease means the lease of a leased aircraft to or by a third party;
- "subsonic aeroplane" means an aeroplane incapable of sustaining level flight at speeds exceeding flight Mach number of one;
- "suitable aerodrome" means an adequate aerodrome -
 - (a) with weather reports or forecasts or any combination thereof, indicating that the weather conditions are at or above operating minima, as specified in the operation specifications;
 - (b) the field condition reports indicate that a safe landing can be accomplished at the time of the intended operation; and
 - (c) the facilities necessary to complete an approach at such aerodrome are operational;

"supplemental-means navigation system" refers to an air navigation system that is used in conjunction with a sole-means navigation system in order for the aircraft to meet the following four navigation system criteria: accuracy, integrity, reliability and continuity;

"supplemental type certificate" means a certificate issued in terms of regulation 21.05.3, which authorises the holder thereof to alter a product for which such holder is not the type certificate holder, by introducing a major change in the type design which is not great enough to require a new application for a type certificate;

"surveillance system" means a generic term referring to ADS-B, PSR, SSR or any comparable ground based system that enables the identification of aircraft;

"synthetic training device" means a device used to simulate a real time scenario for training purposes;

"systems acceptance flight" means a flight for the purpose of testing the operation or effective functioning of a system of an aircraft that does not affect the flying characteristics of the aircraft:

"take-off alternate aerodrome" means an aerodrome to which a flight may proceed should the weather conditions at the aerodrome of departure preclude a return for landing;

"take-off and initial climb phase" means that part of the flight of a helicopter from the start of take-off to 300 m (1 000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or to the end of the climb in the other cases;

"take-off decision point" means the point used in determining take-off performance from which, a power unit failure having been recognised at this point, either a rejected take-off may be made of a take-off safely continued;

"take-off distance available" means -

- (a) in the case of an aeroplane, the length of the take-off run available plus the length of the clearway available; or
- (b) in the case of a helicopter, the distance from the point of lift-off to the nearest obstacle in the take-off path of 50 feet or higher;

"take-off mass" means the mass of the aircraft, including everything and every person carried in the aircraft at the commencement of the take-off run or lift-off, as the case may be;

"take-off run available" means the length of runway which is declared available and suitable for the ground run of an aeroplane taking off;

"tandem master" means the person responsible for the direct control of a tandem parachute descent using a tandem parachute assembly when a tandem passenger is being carried and who has been authorised by an approved aviation recreation organisation;

"tandem parachute descent" means a parachute descent involving a tandem passenger and tandem master in a common tandem parachute assembly which is under the direct control of the tandem master:

"tandem pair" means a tandem master and tandem passenger;

"tandem passenger" means a person participating in a tandem parachute descent under the direct control of a tandem master using the secondary harness of a tandem harness system;

"taxi" means the movement of an aircraft on the surface of an aerodrome under its own power, excluding take-off and landing;

"taxiway" means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, and includes –

- (a) aircraft stand taxilane. A portion of an apron designated as a taxiway and intended to provide access to aircraft stands only;
- (b) apron taxiway. A portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron and
- (c) rapid exit taxiway. A taxiway connected to a runway at an acute angle and designed to allow landing aeroplanes to turn off at higher speeds than are achieved on other exit taxiways thereby minimizing runway occupancy times;

"TCAS I" means ACAS equipment meeting FAA TSO-C118 specifications;

"TCAS II" means ACAS equipment meeting FAA TSO-C119 specifications; the equipment comes in two versions, namely "version 6.04A" meeting TSO-C119a specifications, and "version 7" meeting both TSO-C119b and ICAO-ACAS II specifications;

"Technical Standard Order" means a minimum performance standard issued by the Director for specified materials, parts, processes or appliances, used on aircraft;

"temporary training" means any intermittent training;

"terminal arrival altitude" means the lowest altitude that will provide a minimum clearance of 1 000 ft above all objects located in an arc of a circle defined by a 25 NM radius centred on the initial approach fix (IAF), or where there is no IAF, on the intermediate approach fix (IF), delimited by straight lines joining the extremity of the arc to the IF. The combined TAAs associated with an approach procedure shall account for an area of 360 degrees around the IF;

"terminal control area" means a control area established at the confluence of air traffic service routes in the vicinity of one or more major aerodromes as published in an AIP, AIC or NOTAM and designated as a terminal control area;

"test flight" means a flight for the purpose of the issuing, validating or rendering effective an authority to fly for an aircraft;

"the Act" means the Civil Aviation Act, 2009 (Act No. 13 of 2009);

"the Regulations" means these regulations and include any technical standard issued thereunder;

"threat", as used in the context of operating an aircraft, means events or errors, as defined, that occur beyond the influence of the flight crew, increase operational complexity, and which must be managed to maintain the margin of safety;

"threat management" means the process of detecting and responding to the threats with countermeasures that reduce or eliminate the consequences of threats, and mitigate the probability of errors, as defined, or undesired aircraft conditions;

"threshold" means the beginning of that portion of the runway usable for landing;

"tiltrotor" means a power-driven heavier-than-air aircraft, other than an aeroplane, deriving its lift in flight mainly from aerodynamic reactions –

- (a) on surfaces which remain fixed under given conditions; or
- (b) on more than one power-driven rotors on axis that may be tilted during flight from the vertical to the horizontal and *vice versa*; or
- (c) from a combination thereof;

"total cosmic radiation" means the total of ionizing and neutron radiation of galactic and solar origin;

"total estimated elapsed time" means for IFR flights, the estimated time required from take-off to arrive over that designated point, defined by reference to navigation aids, from which it is intended that an instrument approach procedure will be commenced, or, if no navigation aid is associated with the destination aerodrome, to arrive over the destination aerodrome. For VFR flights, the estimated time required from take-off to arrive over the destination aerodrome:

"total vertical error" means the vertical geometric difference between the actual pressure altitude flown by an aircraft and its assigned pressure altitude (flight level);

"touch-down area" means a load bearing area on which a helicopter may touch down;

"touch-down area available" means the length and width of the touch-down area which is declared available and suitable for the landing of a helicopter;

"touring motor glider" means an aeroplane with a maximum all-up mass of not more than 850 kg fitted with an engine and having the characteristics of a glider when the engine is inoperative that is primarily controlled by manipulating its primary flight control surfaces by conventional methods and other classification parameters as are defined in Document SA-CATS 24;

"tow" means the action of pulling an unmanned object behind an aircraft;

"tow pilot rating" means the rating required by a pilot who intends to act as PIC of an aircraft while towing a banner;

"track" means the projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid);

"traffic alert and collision avoidance system" is the term used by the US FAA for US-developed ACAS equipment, a term also used *inter alia* by the New Zealand authorities;

"traffic avoidance advice" means advice provided by an air traffic services unit specifying manoeuvres to assist a pilot to avoid a collision;

"traffic information" means information issued by an air traffic services unit to alert a pilot to other known or observed air traffic which may be in proximity to the position or intended route of flight and to help the pilot avoid a collision;

"traffic load" means the total mass of passengers, baggage and cargo, including any non-revenue load;

"training" means the training or the tests or the verifications of skill or proficiency, specified in the Regulations;

"transhipment cargo and mail" means cargo or mail that is destined for onward carriage by air;

"transition altitude" means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes;

"transition level" means the altitude above which the vertical position of an aircraft is controlled by reference to flight levels;

"trust" means a trust as defined in the Trust Property Control Act, 1988 (Act No. 57 of 1988);

"tug" means the action of pulling a manned aircraft behind another aircraft;

"TSO authorisation" means a design and production approval issued to the manufacturer of an article which complies with a specific TSO;

"type certificate" means a design approval for Class I product issued in terms of Regulation 21.02.8;

"type of aircraft" means all aircraft of the same basic design including all modifications thereto except those modifications which result in a change in handling or flight characteristics;

"ultimate load" means the limit load, multiplied by the appropriate factor of safety;

"unaccompanied baggage" means baggage which is transported as cargo and may or may not be carried on the same aircraft with the person to whom it belongs;

"unidentified baggage" means baggage at an airport, with or without a baggage tag, which is not picked up by or identified with a passenger;

"unit load device" means any type of freight container, aircraft container, aircraft pallet with a net, or aircraft pallet with a net over an igloo;

"unknown cargo" means cargo that has not been classified as known cargo and that shall be subject to screening when tendered for carriage by air;

"valid" when used in connection with a licence, rating, certificate, validation, authority, approval or similar document means –

- (a) that the expiry date on the document, if any, has not been exceeded;
- (b) that the document has been issued legally and properly to its holder, and has not been suspended or cancelled by the issuing authority; and
- (c) that all requirements, prescribed by these Regulations in respect of the document, have been complied with;

"validation" means an authorisation entered on a licence and forming part thereof to exercise one of the following –

- (a) a specific rating at a specific ATSU; or
- (b) the privileges of the foreign licence to which it is attached,

containing special conditions, privileges or limitations pertaining to such rating, as the case may be;

"validation examiner" means an official validation examiner appointed by the Director or a validation examiner who has been designated in terms of the provisions of Regulation 65.01.9;

"variable-pitch propeller" means a propeller, the pitch setting of which changes or can be changed when the propeller is rotating, and includes –

- (a) a propeller, the pitch setting of which is directly under the control of the flight crew;
- (b) a propeller, the pitch setting of which is controlled by a governor or other automatic means, which may be either integral with the propeller or a separately mounted accessory, and which may, or may not, be controlled by the flight crew; and
- (c) a propeller, the pitch setting of which may be controlled by a combination of (a) and (b) above:

"vertical navigation" refers to a method of navigation that permits aircraft operation on a vertical flight profile, using altimetry sources, external or space-based flight path references, or a combination thereof:

"veteran aircraft" means a previously type-certificated aircraft of which the airworthiness is no longer supported by the holder of the type certificate, or for which a valid type certificate is no longer held by any person;

"visibility" means the ability, as determined by atmospheric conditions and expressed in units of measurement, to see and identify prominent unlighted objects by day and prominent lighted objects by night, expressed in technical terms as –

- (a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background; or
- (b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background;

Notes —

- (a) The two distances have different values in air of a given extinction coefficient, and the latter (b) varies with the background illumination. The former (a) is represented by the meteorological optical range (MOR).
- (b) The definition applies to the observations of visibility in local routine and special reports, to the observations of prevailing and minimum visibility reported in METAR and SPECI and to the observations of ground visibility;

"visual approach" means an approach by an IFR flight when either part or all of an instrument approach procedure is not completed and the approach is executed with visual reference to the terrain:

"visual flight rules flight" means a flight conducted in accordance with the visual flight rules;

"visual meteorological conditions" means atmospheric conditions expressed in terms of visibility, distance from cloud or ceiling, equal to or better than the minima prescribed for VFR flight in regulation 91.06.21;

"weight-shift controlled microlight aeroplane" means an aeroplane that is primarily controlled by physically exerting force on the wing and with other classification parameters as defined in Document SA-CATS 24 as technical standard 24.01.2.E.2;

"wet lease" means an operating lease in terms of which the aircraft is leased with crew, and in respect of which the lessor remains responsible for the aircraft's maintenance, operational control (as defined), and hull and third-party liability insurance;

"wet runway" means a runway of which less than 25 percent of the surface is covered with water, slush or loose snow or when there is sufficient moisture on the runway surface to cause it to appear reflective, but without significant areas of standing water.

Abbreviations

1.01.2 In these regulations –

AC means Advisory Circular

ACAS means airborne collision accordance system and unless the context indicates otherwise, refers to ACAS II;

ACAS II means an airborne collision avoidance system meeting ICAO specifications;

ADF means Automatic Direction Finder;

ADS-B means automatic dependent surveillance – broadcast;

ADS-C means automatic dependent surveillance – contract;

AFM means aircraft flight manual;

AGL means above ground level;

AIC means an Aeronautical Information Circular;

AIP means an Aeronautical Information Publication;

AIRAC means Aeronautical Information Regulation and Control;

AIR SUP means an AIP Supplement;

AIS means aeronautical information services;

ALIM means altitude limit;

AME means Aircraft Maintenance Engineer;

AMO means Aircraft Maintenance Organisation;

AOC means air operator certificate;

APV means approach procedure with vertical guidance;

ATC means Air Traffic Control or Air Traffic Controller;

ATMS means air traffic management system;

ATO means Aviation Training Organisation;

ATPL means Airline Transport Pilot Licence;

ATS means Air Traffic Service:

ATSU means air traffic service unit;

ATZ means an aerodrome traffic zone;

BARO means barometric;

BIFT means Basic Instrument Flight Trainer;

CAR means civil aviation regulation;

CARS means cockpit audio recording system;

CDI means Course Deviation Indicator;

CDL means a configuration deviation list;

CF means Course to a Fix;

CPA means the closest part of approach;

CPL means Commercial Pilot Licence;

CTA means a control area;

CTR means a control zone;

CVR means cockpit voice recorder;

DA/H means decision altitude/height;

DAME means designated aviation medical examiner;

DFE means Designated Flight Examiner;

DME means Distance Measuring Equipment;

DP means departure procedure;

DR means dead reckoning;

DTK means Desired Track;

EFIS means Electronic Flight Instrument System;

ELT means emergency locator transmitter;

EMC means Electromagnetic Compatibility;

EROPS means extended range operations;

ETOPS means extended range operations with twin-engine aircraft;

FAF means Final Approach Fix;

FATO means final approach and take-off area;

FAWP means Final Approach Waypoint;

FDR means flight data recorder;

FL means flight level;

FMS means Flight Management System;

FPT means Flight Procedures Trainer;

FSTD means flight simulator training device;

FS means Flight Simulator;

FTE means Flight Technical Error;

GNSS means Global Navigation Satellite System;

GPS means Global Positioning System;

GS means Ground Speed;

IAF means Initial Approach Fix;

IAIP means an Integrated Aeronautical Information Package;

IAWP means Intermediate Approach Waypoint;

IFR means instrument flight rules;

ILS means instrument landing system;

IMC means instrument meteorological conditions;

LNAV means Lateral Navigation;

LVO means low visibility operations;

LVTO means low visibility take-off;

LOFT means line-orientated flight training;

MAWP means Missed Approach Waypoint;

MCM means maximum certificated mass;

MCTOW means maximum certificated take-off weight;

MDA/H means minimum descent altitude/height;

MEL means a minimum equipment list;

MMEL means a master minimum equipment list;

MNPS means minimum navigation performance specifications;

MSL means mean sea level;

NDB means a non-directional radio beacon;

NM means nautical mile;

NOTAM means a Notice to Airmen;

NPA means non-precision approach;

OCA/H means obstacle clearance altitude/height;

OCS means operational control system;

OFP means operational flight plan;

PA means precision approach;

PAR means Precision Approach Radar;

PBE means portable breathing equipment;

PBN means Performance Based Navigation;

PF means pilot flying;

PIB means a Pre-flight Information Bulletin;

PIC means pilot in command

PICUS means pilot-in-command-under-supervision;

PNF means pilot not flying;

PPI means a Plan Position Indicator;

PPL means Private Pilot Licence;

RA means resolution advisory;

RAIM means Receiver Autonomous Integrity Monitoring;

RCP means required communications performance;

RDH means Reference Datum Height;

RNAV means area navigation

RNAV (GNSS) means GNSS facilitated Area Navigation;

RNP means the required navigation performance;

RVR means runway visual range;

RVSM means reduced vertical separation minima;

SMS means Safety Management System;

SPL means Student Pilot Licence:

STD means Synthetic Training Device;

STOL means short take-off and landing;

TA means traffic advisory;

TAA means terminal arrival altitude:

TAWS means terrain awareness and avoidance system:

TCAS means traffic alert and collision avoidance system;

TGM means technical guidance material;

TLS means target level of safety;

TMA means a terminal control area;

TSO means Technical Standard Order;

TVE means total vertical error;

VFR means visual flight rules;

VHF means very high frequency;

VMC means visual meteorological conditions;

VOR means VHF omni directional radio range;

VPA means vertical path angle;

ZTHR means altitude threshold.

SUBPART 2: UNITS OF MEASUREMENTS

Units of measurement

1.02.1 The following units of measurements shall be used as the standard system of units of measurements for all aspects of civil aviation air and ground operations:

"ampere (A)" is the constant electric current which, if maintained in two straight parallel conductors of infinite length, of negligible circular cross-section, and placed 1 metre apart in

vacuum, would produce between these conductors a force equal to 2 x newton per metre of length;

"becquerel (Bq)" is the activity of a radionuclide having one spontaneous nuclear transition per second:

"candela (cd)" is the luminous intensity, in the perpendicular direction, of a surface of 1/600 000 square metre of black body at the temperature of freezing platinum under a pressure of 101 325 newtons per square metre;

"celsius temperature (t°c)" is equal to the difference t°c = T - To between two thermodynamic temperatures T and To where To equals 273.15 kelvin;

"coulomb (C)" is the quantity of electricity transported in 1 second by a current of 1 ampere;

"degree celsius (°C)" is the special name for the unit kelvin for use in stating values of Celsius temperature;

"farad (F)" is the capacitance of a capacitor between the plates of which there appears a difference of potential of 1 volt when it is charged by a quantity of electricity equal to 1 coulomb;

"foot (ft)" is the length equal to 0.3048 metres exactly;

"gray (Gy)" is the energy imparted by ionizing radiation to a mass of matter corresponding to 1 joule per kilogram;

"henry (H)" is the inductance of a closed circuit in which an electromotive force of 1 volt is produced when the electric current in the circuit varies uniformly at a rate of 1 ampere per second;

"hertz (Hz)" is the frequency of a periodic phenomenon of which the period is 1 second;

"joule (J)" is the work done when the point of application of a force of 1 newton is displaced a distance of 1 metre in the direction of the force;

"**kelvin (K")** is the unit of thermodynamic temperature which is the fraction 1/273.16 of the thermodynamic temperature of the triple point of water;

"kilogram (kg)" is the unit of mass equal to the mass of the international prototype of the kilogram;

"knot (kt)" is the speed equal to 1 nautical mile per hour;

"litre (L)" is a unit of volume restricted to the measurement of liquids and gases which is equal to 1 cubic decimeter:

"lumen (lm)" is the luminous flux emitted in a solid angle of 1 steradian by a point source having a uniform intensity of 1 candela;

- "lux (lx)" is the illuminance produced by a luminous flux of 1 lumen uniformly distributed over a surface of 1 square metre;
- "metre (m)" is the distance travelled by light in a vacuum during 1/299 792 458 of a second;
- "mole (mol)" is the amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kilogram of carbon-12;
- Note. When the mole is used, the elementary entities must be specified and may be atoms, molecules, ions, electrons, other particles or specified groups of such particles.
- "nautical mile (NM)" is the length equal to 1 852 meters exactly;
- "newton (N)" is the force which when applied to a body having a mass of 1 kilogram gives it an acceleration of 1metre per second squared;
- **"ohm (\Omega)"** is the electric resistance between two points of a conductor when a constant difference of potential of 1 volt, applied between these two points, produces in this conductor a current of 1 ampere, this conductor not being the source of any electromotive force;
- "pascal (Pa") is the pressure or stress of 1 newton per square metre;
- "radian (rad)" is the plane angle between two radii of a circle which cut off on the circumference an arc equal in length to the radius;
- "second (s)" is the duration of 9 192 631 770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the caesium-133 atom;
- "siemens (S)" is the electric conductance of a conductor in which a current of 1 ampere is produced by an electric potential difference of 1 volt;
- "sievert (Sv)" is the unit of radiation dose equivalent corresponding to 1 joule per kilogram;
- "steradian (sr)" is the solid angle which, having its vertex in the centre of a sphere, cuts off an area of the surface of the sphere equal to that of a square with sides of length equal to the radius of the sphere;
- "tesla (T)" is the magnetic flux density given by a magnetic flux of 1 weber per square metre;
- "tonne (t)" is the mass equal to 1 000 kilograms;
- "volt (V)" is the unit of electric potential difference and electromotive force which is the difference of electric potential between two points of a conductor carrying a constant current of 1 ampere, when the power dissipated between these points is equal to 1 watt;
- "watt (W)" is the power which gives rise to the production of energy at the rate of 1 joule per second; and

"weber (Wb)" the magnetic flux which, linking a circuit of one turn produces in it an electromotive force of 1 volt as it is reduced to zero at a uniform rate in 1 second.

PART 11: PROCEDURES FOR MAKING REGULATIONS AND TECHNICAL STANDARDS, GRANTING EXEMPTIONS AND NOTIFYING DIFFERENCES

List of regulations

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	E4. CENEDAL

SUBPART 1: GENERAL

Applicability

11.04.2

Application for exemption

- 11.01.1 (1) This Part applies to the procedures relating to -
 - (a)
 - the issuing, amendment or withdrawal of regulations; the issuing, amendment or withdrawal of technical standards; (b)
 - the application for and the granting of exemptions; (c)
 - (d)
 - the identifying and notifying of differences; and the institution of specialised committees by the Director. (e)

- (2) This Part does not apply in respect of a particular case where the Director finds compliance with any procedure prescribed in this Part to be impractical, unnecessary or contrary to public interest.
- (3) A regulation, technical standard or exemption shall not be invalid merely because a requirement in this Part has not been complied with.

Publication of AICs

11.01.2 The Director may publish AICs containing information on technical standards, practices or procedures which the Director finds to be acceptable for compliance with the associated regulation.

Rules, orders, directives, notices

- **11.01.3** (1) The Director may make rules, orders, directives or notices regarding any matter which the Director may consider necessary or expedient to prescribe in order that the objects of the Act and the Regulations may be achieved.
- (2) The Director shall publish rules, orders, directives or notices referred to in sub-regulation (1) for public information.
- (3) The Director may issue airworthiness directives provided this is issued in accordance with the provisions of Part 21.

SUBPART 2: CIVIL AVIATION REGULATIONS COMMITTEE

Institution of committee

- **11.02.1** (1) The Director shall institute a Civil Aviation Regulations Committee to advise the Minister on proposals with regard to
 - (a) the introduction of any regulation to be made under section 155;
 - (b) the amendment or withdrawal of any regulation made under section 155;
 - (c) the introduction of any technical standard to be issued under section 163;
 - (d) the amendment or withdrawal of any technical standard issued under section 163;
 - (e) any matter relating to civil aviation, including any such matter referred to it by the Director.
- (2) The members of the committee consist of
 - (a) the Director;
 - (b) the chairperson of each sub-committee established by the committee in terms of section 159;

- (c) such other persons appointed by those stakeholders and recognised by the Director which shall include representation from
 - (i) the general aviation, recreational aviation and commercial aviation industry;
 - (ii) the Air Traffic and Navigation Services Company Limited contemplated in section 2 of the Air Traffic and Navigation Services Company Act, 1993 (Act no. 45 of 1993);
 - (iii) the South African Police Services;
 - (iv) the South African National Defence Force;
 - (v) the Airports Company contemplated in section 2 of the Airports Company Act, 1993 (Act No. 44 of 1993);
 - (vi) the Department; and
 - (vii) any other stakeholder as determined by the Director.
- (3) Subject to the provisions in this subpart, the committee shall in consultation with the Director, determine the procedures to be followed in the performance of its functions.

Meetings of the committee

- **11.02.2** (1) The committee shall hold meetings at least twelve times a year at such times and places as may from time to time be determined by the chairperson.
- (2)(a) The chairperson shall normally preside at every meeting of the committee;
- (b) If the chairperson is absent from a meeting of the committee, the members present shall from among their number elect a person to preside at that meeting.
- (3) The procedures to be followed at meetings of the committee shall be determined by the chairperson.
- (4) The committee shall cause minutes to be kept of every meeting thereof.
- (5) The minutes referred to in sub-regulation (4), shall be kept at the offices of the Director.
- (6) Notwithstanding sub-regulation (1), the Director may at any time call an extraordinary meeting of the committee in circumstances which he deems necessary and in the public interest.

Subcommittees of the committee

11.02.3 (1) The committee may, with the approval of the Director, establish such subcommittees as it may deem necessary for the performance of its functions.

- (2) The membership of each subcommittee established in terms of sub-regulation (1) shall be unlimited.
- (3) The chairperson of the committee shall appoint a chairperson for each subcommittee so established.
- (4) Subject to the provisions of this subpart, the committee shall, after consultation with the Director, determine the procedures to be followed by a subcommittee in the performance of its functions.
- (5) The provisions of section 158 of the Act applies, with the necessary changes, in respect of any meeting held by a subcommittee.

Remuneration of members

11.02.4 A member of the committee referred to in regulation 11.02.1 and a member of any subcommittee established in terms of regulation 11.02.3 shall not receive any remuneration or allowance in respect of the functions performed by such member as a member of the committee or a subcommittee.

Administration

11.02.5 All administrative work as well as secretarial work, in connection with the performance of the functions of the committee and any subcommittee established in terms of regulation 11.02.3, shall be carried out by employees of the Authority.

SUBPART3: PROCEDURE FOR MAKING REGULATIONS AND ISSUING TECHNICAL STANDARDS

Submission of proposal

- **11.03.1** (1) Any interested person may submit to the committee referred to in regulation 11.02.1, a proposal on the introduction, amendment or withdrawal of a regulation or technical standard.
- (2) The proposal shall be submitted in writing and shall
 - (a) state the name and address of the proposer;
 - (b) state the contents of the regulation, technical standard or amendment proposed, or specify the regulation or technical standard which the proposer wishes to be withdrawn;
 - (c) explain the interests of the proposer; and
 - (d) contain any information, views or arguments supporting the proposal.

Processing and consideration of proposals

- **11.03.2** (1) Proposals for submission to the committee shall be lodged with the Secretariat at least four weeks before the meeting in which the proposal will be tabled.
- (2) Any proposal for the amendment of Regulations, which require an amendment or introduction of Technical Standards, shall also be accompanied by the amendment or introduction of such Technical Standards.
- (3) The Secretariat shall review any received proposals to ensure compliance with subregulations (1) and (2) and thereafter submit the proposal to the committee Chairperson, who will circulate copies thereof to committee members for consideration. The proposal shall be tabled in the subsequent committee meeting for scrutiny.
- (4) If so directed by the Chairperson, the proposer may be requested to give a short presentation on the proposal at a committee meeting to clarify certain issues.
- (5) During a committee meeting in which the proposal is tabled for scrutiny, the committee may
 - (a) if it is of the view that the proposal does not have any merit, reject the proposal and refer it back to the proposer with written reasons thereof;
 - (b) if it is of the view that the proposal should be referred to a Sub-Committee for scrutiny, refer the proposal to the Chairperson of the relevant Sub-Committee for tabling at a meeting of the Sub-Committee for scrutiny;
 - (c) if it is of the view that in the light of the nature and ambit of the proposal, it need not be referred to the relevant Sub-Committee, direct that the said proposal be published for comments in terms of sub-regulation (6).
- (6) Once a proposal has been approved by committee or the relevant Sub-Committee for publication for comments, the CARCom Secretariat shall publish the proposal in the case of Regulations, in the Government Gazette or, in the case of Technical Standards, on the Authority website.
- (7) A period of not less than 30 days from the date of publication of the proposal shall be allowed for interested parties to submit written comments regarding the proposal to the Secretariat.
- (8) The Secretariat shall, as soon as possible after the closing date for comments, submit the proposals together with any comments received to the relevant Sub-Committee, or if the proposal was published in terms of sub-regulation (5)(c) to the committee, for discussion.
- (9)(a) The Sub-Committee shall, after discussion, submit to the CARCom Secretariat the final proposal, as well as any minority view for discussion at a subsequent committee meeting, in the format as indicated on the Authority website.

- (b) The Chairperson of the relevant Sub-Committee shall present to committee a summary of the discussions in the Sub-Committee.
- (10) The committee shall, at its meeting, deliberate on the proposals and may decide
 - (a) to recommend the proposals for approval for promulgation in the Government Gazette or, on the Authority website, as the case may be;
 - (b) to refer it back to the relevant Sub-Committee for further deliberations; or
 - (c) to reject the proposal.

(11) Once a proposal for –

- (a) regulations is recommended by the committee, the committee Chairperson and the Director shall sign off the submission of recommended proposals, for promulgation, to the Minister within 7 days of these being approved.
- (b) technical standards is recommended by the committee, the Chairperson shall sign off the submission of the recommended proposals, to the Director within 7 days of these being approved.
- (12) An oral submission on a proposal shall be permissible only if it clarifies a written comment submitted in terms of this clause.
- (13) In the event that a proposal affects a specific group, experts in their respective fields may, with the consent of the Chairperson of committee, be called upon to present a specific case. Such participation shall be on an *ad hoc* basis, and shall not entitle the experts to membership or voting rights in CARCom.

Emergency regulations

- **11.03.3** (1) The Director may, in the event of any threat or imminent threat to safety and security or in the event of any person, aircraft, airport, heliport or aviation facility being seriously and immediately threatened, initiate the promulgation of emergency regulations by the Minister, in order to counter any such threat or imminent threat.
- (2) Any regulation promulgated as contemplated in sub-regulation (1) shall be reconsidered by the Civil Aviation Regulations Committee within 90 days of promulgation of such regulation, and the Committee may propose the repeal, variation or amendment of such regulation.

Rule-making notification subscriber service

11.03.4 (1) To facilitate the consultation process, the Director shall make available on the Authority website a rule-making notification subscriber service to which any person may

subscribe and unsubscribe at no cost and who shall be notified by e-mail of any proposal to make, amend or withdraw any regulation or technical standard, and of any related matter.

- (2) Any technical standard issued shall be published on the Authority website for free downloading, and may be ordered from the Authority in either hard copy or electronic format at the prescribed fee.
- (3) A technical standard issued in terms of this Part shall contain a unique historical reference and date when published on the Authority website.

SUBPART 4: PROCEDURE FOR GRANTING OF EXEMPTIONS AND RECOGNITION OF ALTERNATIVE MEANS OF COMPLIANCE

General

- **11.04.1** The Director may exempt an applicant from any requirement prescribed in the regulations, after having regard to
 - (a) the reasons for the required exemption;
 - (b) any serious or imminent risk to air safety and security;
 - (c) the existence of an equivalent level of safety;
 - (d) any imminent danger to persons or property if the exemption is granted; and
 - (e) any information at his or her disposal.

Application for exemption

- 11.04.2 (1) An application for an exemption shall be made in writing to the Director and shall
 - (a) state the name and address of the applicant;
 - (b) state the requirement from which exemption is requested;
 - explain the interests of the applicant in the exemption requested, including the nature and extent of the exemption requested and a description of each person or thing to be covered by the exemption;
 - (d) contain any information, views or arguments supporting the application;
 - (e) explain why the applicant believes that the exemption should be granted, including the reasons why it would not be possible or desirable to comply with the requirement which is the subject of the application, as well as the extent to which the exemption may affect aviation safety; and

- (f) include a summary of the application which summary shall contain a reference to the requirement from which exemption is requested and a brief description of the general nature of the exemption requested.
- (2) An application for an exemption shall be accompanied by the appropriate fee prescribed in Part 187 and—
 - (a) shall be submitted at least 60 days, or such shorter period as the Director may allow on good cause shown, before the proposed effective date of the exemption; or
 - (b) in the case of an urgent exemption shall be submitted 3 working days before the proposed effective date of the exemption, or such shorter period as the Director may allow on good cause shown.
- (3) In case where an application for exemption cannot be processed within the periods referred to in sub-regulation (2) the Director shall notify the applicant and in the case of urgent exemptions adjust the applicable fee.

Processing of application for exemption

11.04.3 The Director may, before deciding whether to grant or refuse an exemption, afford the applicant an opportunity to make representations either in writing or in person, regarding the exemption.

Granting or refusal of exemption

- **11.04.4** (1) The Director may
 - (a) grant an exemption under such conditions and for such period which the Director may determine, which may not exceed 180 days; or
 - (b) refuse an exemption.
- (2) The Director shall give written notice to the applicant of
 - (a) his or her decision; and
 - (b) if the decision was to refuse to grant the exemption or to impose a condition not sought by the applicant, the reasons for the decision.
- (3) The Director shall within 3 working days from the date from which any exemption of a non-administrative nature, such nature decided upon by the Director, has been granted, publish the full particulars thereof on the Authority website.

Application for extension of exemption

11.04.5 (1) The Director shall not grant an exemption under this Part to a person in the same or similar terms as an exemption previously granted under this Part to the person unless the person –

- (a) applies, in accordance with regulation 11.04.1, for the new exemption; and
- (b) includes with the application a statement of the additional reasons why the exemption is necessary, or the reasons why the continuation of the exemption is necessary.
- (2) The Director may grant an extension to an exemption under such conditions and for such period which the Director may determine, which may not exceed 180 days.
- (3) An application for the extension of exemption shall be accompanied by the fees prescribed in Part 187.
- (4) The provisions of regulations 11.04.2 to 11.04.4 apply with the necessary changes in relation to the consideration of an application mentioned in sub-regulation (1).

Recognition of alternative means of compliance

- **11.04.6** (1) The Director may, on good cause shown, approve an alternative means of compliance if the Director is satisfied that aviation safety will not be jeopardised.
- (2) An application for recognition of alternative means of compliance shall be in the format, and dealt with in the manner prescribed in regulations 11.04.2 and 11.04.3.

SUBPART 5: NATIONAL AIRSPACE COMMITTEE

Institution of the committee

- **11.05.1** (1) The Director shall institute a National Airspace Committee to provide guidelines and recommendations to the Director on
 - (a) the designation of airspace referred to in regulation 172.02.1;
 - (b) the classification of such designated airspace as per regulation 172.02.2;
 - (c) the introduction, amendment or withdrawal of such airspaces;
 - (d) the allocation of Air Traffic Services provided or intended to be provided within airspaces or at aerodromes;
 - (e) the validity of current airspace structures and associated Air Traffic Services provided within such structures as defined in the National Airspace Master Plan (NAMP);
 - (f) the introduction, amendment or withdrawal of Communication Navigation and Surveillance (CNS) or Air Traffic Management (ATM) Facilities where these affect the designation or classification of airspace or the NAMP;
 - (g) the application for an aerodrome licence as well as any significant amendment thereof as per regulation 139.02.13, where such aerodrome is situated;

- (i) within any portion of airspace designated as a Control Zone (CTR) or Aerodrome Traffic Zone (ATZ) or within 10NM of such airspace's boundary;
- (ii) under any portion of airspace designated as a TMA as defined in Part 1 of the regulations;

Note: Significant amendments of aerodrome licences shall be when any airspace or maneuvring are changes are proposed.

- (h) any matter relating to the national airspace, including such matter referred to it by the Director.
- (2) The members of the committee shall be appointed as prescribed in Document SA-CATS 11 and shall consist of
 - (a) a person designated by the Director, as chairperson; and
 - (b) such other persons appointed by those stakeholders and recognised by the Director, which shall include representation from -.
 - (i) general aviation, recreational aviation and commercial aviation
 - the Air Traffic and Navigation Services Company Limited contemplated in section 2 of the Air Traffic and Navigation Services Company Act, 1993 (Act no. 45 of 1993);
 - (iii) the South African National Defence Force;
 - (iv) the Airports Company contemplated in section 2 of the Airports Company Act, 1993 (Act No. 44 of 1993);
 - (v) the Department; and
 - (vi) any other stakeholder as determined by the Director.
- (3) The committee shall, in consultation with the Director, determine the procedures to be followed and the criteria to be taken into account when the committee exercises its functions.

Meetings of the committee

- **11.05.2** (1) The committee shall hold meetings at least once every three months at such times and places as may from time to time be determined by the chairperson.
- (2) (a) The chairperson shall normally preside at every meeting of the committee.
- (b) If the chairperson is absent from a meeting of the committee, the members present shall from among their number elect a person to preside at that meeting.
- (3) The procedures to be followed at meetings of the committee shall be determined by the chairperson.
- (4) The committee shall cause minutes to be kept of every meeting thereof.
- (5) The minutes referred to in sub-regulation (4), shall be kept at the offices of the Director.

(6) Notwithstanding sub-regulation (1), the chairperson may at any time call an extraordinary meeting of the committee in circumstances which he or she deems necessary and in the public interest

Subcommittees of the committee

- **11.05.3** (1) The committee may, with the approval of the Director, establish such subcommittees as it may deem necessary for the performance of its functions.
- (2) The membership of each subcommittee established in terms of sub-regulation (1) shall be determined by the chairperson of the National Airspace Committee and shall ensure sufficient members from affected stakeholders.
- (3) The chairperson of the committee shall appoint a chairperson for each subcommittee so established.
- (4) Subject to the provisions of this subpart, the committee shall, after consultation with the Director, determine the procedures to be followed by a subcommittee in the performance of its functions.

Remuneration of members

11.05.4 A member of the committee referred to in regulation 11.05.1(2) shall not receive any remuneration or allowance from the Authority in respect of the functions performed by such member as a member of the committee.

Administration

11.05.5 All administration work as well as secretarial work, in connection with the performance of the functions of the committee, shall be carried out by employees of the Authority designated for such purpose by the Director .

Submission of proposals

- **11.05.6** (1) Any interested person may submit to the committee referred to in regulation 11.05.1, a proposal on
 - (a) the introduction, amendment or withdrawal of national airspace designation or classification;
 - (b) the allocation of Air Traffic Services provided or intended to be provided within airspaces or at aerodromes;
 - (c) the introduction, amendment or withdrawal of CNS or ATM Facilities where these affect the designation or classification of airspace or the NAMP;
 - (d) the application for an aerodrome licence as well as any significant amendment there of as per regulation 139.02.13, where such aerodrome is situated –

- (i) within any portion of airspace designated as a Control Zone (CTR) or Aerodrome Traffic Zone (ATZ) or within 10NM of such airspace's boundary; or
- (ii) under any portion of airspace designated as a TMA as defined in Part 1 of the Regulations
- (2) The proposal shall be submitted in writing as prescribed in Document SA-CATS 11.

Processing and consideration of proposals

- **11.05.7** (1) The Secretariat of the committee shall put any received proposal on the agenda of the next meeting of the committee, provided the agenda has not yet been closed, in which case it must be put on the agenda of the subsequent meeting.
- (2) The Secretariat shall notify the proposer in writing of the time and place of the meeting during which the proposal will be considered, to give the proposer the opportunity to motivate his or her proposal and to participate in the deliberations thereon in person or in support of a representative association, organisation or body, if he or she so wishes.
- (3) The committee shall give due consideration to the proposal and take a position thereon, if necessary after obtaining additional information and advice.
- (4) The Secretariat shall Inform the proposer in writing of any decision by the committee in respect of his or her proposal, and should the decision have been a rejection, stating the reasons therefore.
- (5) The committee shall give due consideration to any comments received and make an appropriate recommendation to the Director.

Issuing of aeronautical information

11.05.8 The Director shall, if he or she is satisfied, after considering the recommendation made by the committee in terms of regulation 11.05.1 (1), that giving effect to the proposal is in the interest of aviation safety, publish the changes in the IAIP.

SUBPART 6: PROCEDURE FOR IDENTIFYING AND NOTIFYING OF DIFFERENCES

General

- **11.06.1** (1) The Director-General shall develop and implement procedures to ensure the review of regulatory requirements to ensure the regulations or practices are in full accord, where practicable, with any established international standard or procedure and after amendment of such standards or procedures.
- (2) The responsibility for the identification of differences rests with
 - (a) in the case of Annex 3 of the Convention, the South African Weather Services;
 - (b) in the case of Annex 12 of the Convention, the Department;

- (c) in the case of Annex 9 of the Convention, the Authority or the Department or the Department of Home Affairs, as applicable;
- (d) in the case of Annex 10 of the Convention, the Authority or the Independent Communications Authority of South Africa, as applicable;
- (e) in the case of Annexes 1, 2, 4, 5, 6, 7, 8, 11, 14, 15, 16, and 18, the Civil Aviation Authority;
- (f) in the case of Annex 17 of the Convention, the Authority or the Department of Transport, as applicable and
- (g) in the case of Annex 13, the Authority until the establishment of the Aviation Safety Investigation Board, after which the latter shall become responsible.

Identification of differences

- **11.06.2** The persons or organisations mentioned in regulation 11.06.1 (2) shall identify the following differences:
 - (a) a Category A, when the national regulation is more stringent than the corresponding Standard and Recommended Practice (SARP), or imposes an obligation within the scope of the Annex which is not covered by a SARP;
 - (b) a Category B, when the national regulation is different in character from the corresponding ICAO SARP, or when the national regulation differs in principle, type or system from the corresponding SARP, without necessarily imposing an additional obligation; and
 - (c) a Category C, when the national regulation is less protective than the corresponding SARP; or when no national regulation has been promulgated to address the corresponding SARP, in whole or in part.

Notification of differences

- **11.06.3** (1) The Department shall notify ICAO of the differences using the following format, as prescribed by ICAO:
 - (a) Reference the number of the paragraph or subparagraph in an Annex as amended which contains the Standard or Recommended Practice to which the difference relates;
 - (b) Category indicate the category of the difference as mentioned in regulation 11.06.2 above;
 - (c) Description of the difference clearly and concisely describe the difference and its effect;
 - (d) Remarks under "Remarks" indicate reasons for the difference and intentions including any planned date for implementation.

- (2) The notification of differences referred to in sub-regulation (1) shall be submitted within the timelines indicated by ICAO.
- (3) The Department shall maintain a register of South African notifications submitted to ICAO, which shall be called "Register of South African notification of differences from ICAO Standards and Recommended Practices".
- (4) An excerpt of the register referred to in sub-regulation (3) above shall be furnished by the Director General, to any person who may request such an excerpt.

PART 12: AVIATION ACCIDENTS AND INCIDENTS

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SUBPART 1: GENERAL

Applicability

- **12.01.1** This Part applies to the procedures relating to the reporting and investigation of accidents and incidents other than accidents and incidents involving
 - (a) aircraft so designed to remain moored to the earth or to be kept in tow by vehicles or vessels moving on the surface of the earth; and
 - (b) aircraft designed to fly without any person on board.

Designation of body or institution

- **12.01.2** (1) The Director may designate a body or institution to
 - (a) promote aviation safety or to reduce the risk of aviation accidents or incidents; and
 - (b) advise the Director on any matter connected with the promotion of aviation safety or the reduction of the risk of aviation accidents or incidents.
- (2) The designation referred to in sub-regulation (1) shall be made in writing and shall be published by the Director in the *Gazette* within 30 days from the date of such designation.
- (3) The powers and duties referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 12.

Designation of investigator-in-charge

- **12.01.3** (1) The Director may designate an investigator-in-charge to investigate any accident or incident in terms of this part.
- (2) An investigator-in-charge shall have authority, subject to the provisions of this part, to
 - (a) have unhampered access to an aircraft which has been involved in an accident or incident, the wreck or wreckage, the place where the aircraft, the wreck or wreckage is located and the places where marks resulting from the accident or incident which may be of assistance in an investigation, are located;
 - (b) preserve an aircraft which has been involved in an accident or incident or the wreck or wreckage and any marks resulting from the accident or incident which may be of assistance in the investigation, by any means available, including photographic means;
 - (c) examine an aircraft involved in an accident or incident, the wreck or wreckage, any part or component thereof or anything transported therein or any marks resulting from the accident or incident which may be of assistance in the investigation, and to remove any such aircraft, wreck or wreckage, or any part or component thereof or anything transported therein for the purpose of the investigation or for an inquiry by a Commission of inquiry appointed in terms of section 69 of the Act;
 - (d) compile reports in connection with the investigation;
 - (e) have unhampered access to all documents, books, notes, photographs, recordings and transcripts which the investigator-in-charge may consider necessary for the investigation, which documents, books, notes, photographs, recordings and transcripts shall be produced without delay by the possessor thereof when so requested; and
 - (f) obtain information from any person which may be necessary for the investigation.

Designation of investigator

- **12.01.4** (1) The Director may designate an investigator for the purposes of assisting an investigator-in-charge in the investigation of an accident or incident.
- (2) An investigator may exercise all the powers granted to and imposed on an investigator-incharge in terms of regulation 12.01.3(2), which are assigned to such investigator by the investigator-in-charge.
- (3) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to in sub-regulation (1), shall be as prescribed in Document SA-CATS 12.
- (4) The Director shall sign and issue to each investigator so designated, a document which shall state the full name of such investigator and contain a statement indicating that
 - (a) such investigator has been designated in terms of sub-regulation (1); and

(b) such investigator is empowered to exercise any power entrusted to him or her in terms of this part.

Designation of pro tem investigator

- **12.01.5** (1) The Director may designate a pro tem investigator for the purposes of assisting the investigator-in-charge in the initial investigation of an accident or incident.
- (2) A *pro tem* investigator may exercise all the powers granted to and imposed on an investigator-in-charge in terms of regulation 12.01.3(2), which are assigned to such investigator by the investigator-in-charge.
- (3) A pro tem investigator shall, as soon as practicable after the arrival of the investigator-incharge on the scene of an accident or incident, report on his or her initial investigation to such investigator-in-charge.
- (4) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to in sub-regulation (1), shall be as prescribed in Document SA-CATS 12.
- (5) The Director shall sign and issue to each pro tem investigator so designated, a document which shall state the full name of such *pro tem* investigator and contain a statement indicating that
 - (a) such pro tem investigator has been designated in terms of sub-regulation (1); and
 - (b) such *pro tem* investigator is empowered to exercise any power entrusted to him or her in terms of this part.

Designation and acceptance of accredited representative

12.01.6 (1) The Director may –

- (a) designate an accredited representative, for the purposes of investigating an accident or incident involving a South African registered aircraft in a territory of a contracting or non-contracting State; or
- (b) accept the accreditation or appointment of an accredited representative of the State of Registry, State of the Operator, State of Design or State of Manufacture for the purposes of participating in investigating an accident or incident involving a South African or a foreign registered aircraft in the territory of the Republic.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a designation or acceptance referred to, shall be as prescribed in Document SA-CATS 12.
- (3) An accredited representative designated or accepted in terms of sub-regulation (1) may participate in the investigation of the accident or incident under the control of the investigator-incharge.

- (4) An accredited representative designated or accepted in terms of sub-regulation (1) may, under the control of the investigator-in-charge
 - (a) visit the scene of the accident;
 - (b) examine the wreckage;
 - (c) obtain witness information and suggest areas of questioning;
 - (d) have access to all relevant evidence;
 - (e) receive copies of all relevant documents, books, notes, photographs, recordings and transcripts;
 - (f) participate in readouts of recorded media;
 - (g) participate in component examinations, technical briefings, tests and simulations and other investigative activities;
 - (h) participate in deliberations on the analysis, findings, cause or causes and safety recommendations; and
 - (i) make submissions in respect of the various elements of the investigation.
- (5) An accredited representative designated or accepted in terms of sub-regulation (1) shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by the State conducting the investigation.

Designation of advisor

12.01.7 (1) The Director may –

- (a) designate an advisor for the purpose of assisting an accredited representative in the investigation of an accident or incident;
- (b) accept an advisor from the State of Registry, State of the Operator, State of Design or State of Manufacture for the purpose of assisting an accredited representative in the investigation of an accident or incident.
- (2) An advisor designated in terms of sub-regulation (1) shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by the State conducting the investigation.
- (3) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to, shall be as prescribed in Document SA-CATS 12.

Designation of experts

12.01.8 (1) The Director may appoint an expert, where a citizen of the Republic of South Africa is fatally injured or has suffered serious injuries in an aircraft accident or incident involving a foreign registered aircraft in the territory of a contracting or non-contracting State.

- (2) The Director shall inform the State of Occurrence of the intention to appoint experts to participate in the investigation of the occurrence.
- (3) The Director may accept the appointment of an expert from any State, whose citizens were fatally injured or suffered serious injuries in a South African or a foreign registered aircraft accident or incident in the territory of the Republic.
- (4) The expert referred to in sub-regulation (3) may, under the control of the investigator-in-charge:
 - (a) visit the scene of the accident;
 - (b) have access to the relevant factual information;
 - (c) participate in the identification of the victims;
 - (d) assist in questioning surviving passengers who are citizens of the expert's State; and
 - (e) receive a copy of the final report.
- (5) An expert appointed in terms of sub-regulation (1) or accepted in terms of sub-regulation (3) shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by the State conducting the investigation.
- (6) The conditions, requirements, rules, procedures and standards connected with a designation or acceptance of expert referred to in sub-regulations (1) and (3), shall are prescribed in Document SA-CATS 12.

Powers of the Investigator in Charge or an Investigator

- **12.01.9** (1) In addition to any other power granted to or duty imposed on an Investigator in Charge (IIC) or an Investigator under any part of the regulations, such IIC or Investigator may
 - (a) enter any premises for the purpose of examining any aircraft, aircraft factory, aerodrome, civil aviation related facility, aircraft component, aircraft equipment, licence, certificate, permit, approval, authorization, register, book or document which he or she believes to be on such premises;
 - (b) confiscate anything, article, book, register, document, aircraft, aircraft component, aircraft equipment, licence, certificate, permit, approval or authorizations, which he or she reasonably believes will assist in the investigation process;
 - (c) recommend to the Director for the grounding of any aircraft which he or she reasonably believes to be unsafe, not duly registered or not airworthy;
 - (d) recommend to the Director for the closure of any aviation related facility which he or she reasonably believes does not comply with the Act or the regulations;
 - (e) require the pilot of an aircraft to furnish his or her name and address and any other particulars concerning his or her identity;

- (f) require any person on an aerodrome or in an aircraft, aircraft factory or civil aviation related facility to furnish his or her name and address and any other particulars concerning his or her identity and to furnish such information as is at his or her disposal concerning the identity of the pilot or owner of any aircraft, or the owner of any aerodrome, aircraft factory or civil aviation related facility;
- (g) require the owner or operator of an aircraft to furnish such information as may be necessary concerning the identity of the pilot of the aircraft at any time or during any particular period;
- (h) inspect or investigate an aircraft, or any part, component or equipment of such aircraft, for the purpose of ascertaining whether the provisions of the regulations or a technical standard are being complied with;
- (i) ascertain the mass of any aircraft with or without load;
- (j) call upon any person required by the regulations to be the holder of a licence, certificate, permit, approval or authorization or, in the case of a flight crew member or an AME, his or her log-book, for inspection or investigation within a reasonable time to be stipulated by such IIC or Investigator; and
- (k) call upon the owner, operator or PIC of any aircraft to produce or cause to be produced for inspection or investigation any licence, certificate, manual, log-book or other document relating to the aircraft or crew.
- (2) Should it appear to any IIC or Investigator that any aircraft is intended or likely to be flown under circumstances where the flight would involve a contravention of the regulations, or will cause danger to persons in the aircraft or to persons or property on the ground, he or she may take such action to delay the flight or such other action as he or she may deem necessary for the purpose of causing the circumstances relating to the flight to be investigated or the aircraft to be inspected.
- (3) If a flight has been delayed in terms of sub-regulation (2), the aircraft shall not be operated until the Director is satisfied that the regulations are being complied with and that the flight will not cause danger to persons or property.

Establishment of confidential aviation hazard reporting system

- **12.01.10** (1) The designated body or institution referred to in regulation 12.01.2, shall establish a confidential aviation hazard reporting system to promote aviation safety or reduce the risk of accidents or incidents.
- (2) The requirements for and the procedures of a confidential aviation hazard reporting system and the manner in which such system shall be operated, shall be as prescribed in Document SA-CATS 12.
- (3) Any person who exercises or has exercised any function in terms of the confidential aviation hazard reporting system, shall not disclose any information which he or she obtained in the performance of such function which could identify the originator of the notice referred to in regulation 12.02.5.

SUBPART 2: ACCIDENT OR INCIDENT NOTIFICATION PROCEDURES

Notification of accidents

- **12.02.1** (1) The PIC of an aircraft involved in an accident within the Republic, or if he or she is killed or incapacitated, a flight crew member, or if there are no surviving flight crew members or if they are incapacitated, the operator or owner, as the case may be, shall, as soon as possible but at least within 24 hours since the time of the accident, notify
 - (a) the Director;
 - (b) an ATSU; or
 - (c) the nearest police station, of such accident.
- (2) If an ATSU or police station is notified of an accident in terms of sub-regulation (1), such ATSU or police station shall, immediately on receipt of the notification, notify
 - (a) the Director; and
 - (b) where such accident occurs on an aerodrome, the aerodrome manager.

Notification of incidents

- **12.02.2** (1) The PIC, and any other flight crew member, operator or owner, as the case may be, of an aircraft involved in an incident (including a serious incident), other than an ATS incident, within the Republic, shall, as soon as possible but at least within 24 hours since the time of such incident, notify
 - (a) the Director; or
 - (b) an ATSU; or
 - (c) the nearest Police Station,

of such incident.

- (2) If an ATSU is notified of an incident in terms of sub-regulation (1), such ATSU shall, immediately on receipt of the notification and as prescribed in Document SA-CATS 12, notify
 - (a) the Director, and
 - (b) where such incident occurs on an aerodrome, the aerodrome manager.
- (3) The PIC, any other flight crew member, operator or owner, as the case may be, of an aircraft involved in an ATS incident within the Republic, or any ATS personnel witnessing an ATS incident, shall, as soon as possible, notify an ATSU of such ATS incident, and such ATSU shall immediately on receipt of the notification, notify the Director in the appropriate form.

Notification of accidents or incidents outside the Republic

12.02.3 The PIC of a South African registered aircraft involved in an accident or incident outside the Republic, or if he or she is killed or incapacitated, a flight crew member, or if there are no surviving flight crew members, or if they are incapacitated, the operator or owner, as the case may be, shall as soon as possible, notify –

- (a) the appropriate authority in the State or territory where the accident or incident occurred, directly or through any ATSU; and
- (b) the Director,

of such accident or incident.

Particulars of notification

12.02.4 Any notification of an accident or incident referred to in regulation 12.02.1, 12.02.2 or 12.02.3 other than an ATS incident, shall –

- (a) include the following particulars:
 - (i) type, model, nationality and registration marks of the aircraft;
 - (ii) name of the owner or operator, as applicable;
 - (iii) qualification of flight crew members;
 - (iv) the date and time of the accident or incident, specified in Co-ordinated Universal Time or local time:
 - (v) last point of departure and point of intended landing of the aircraft;
 - (vi) location of accident or incident with reference to an easily identifiable geographical point and, if known, with reference to latitude and longitude; number of –
 - (aa) flight crew members and passengers aboard, killed or seriously injured; and
 - (bb) other persons killed or seriously injured;
 - (vii) nature of the accident or incident and extent of damage to aircraft as far as is known:
 - (viii) terrain characteristics of the area where the accident or incident occurred;
 - (ix) details of any dangerous goods or hazardous substances known to be on board the aircraft; and
 - (x) any other relevant information; and
- (b) be submitted forthwith to the Director, and any information which is not immediately available shall be submitted in writing as soon as it becomes available.

Notification of hazards

- **12.02.5** (1) Any person involved in an accident or incident, or observing any accident, incident, hazard or discrepancy that may affect aviation safety, may notify the designated body or institution referred to in regulation 12.01.2, of such accident, incident, hazard or discrepancy.
- (2) Any person who notifies the designated body or institution referred to in regulation 12.01.2 of an accident or incident, shall not be absolved from the duty to notify the Director of such accident or incident in terms of regulation 12.02.1, 12.02.2 or 12.02.3, as the case may be.

SUBPART 3: INVESTIGATION OF ACCIDENTS OR INCIDENTS

Purpose of accident or incident investigation

12.03.1 The purpose of investigation of an accident or incident is to determine, in terms of the provisions of this Part, the facts of an accident or incident in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents, and not to establish legal liability.

Accident or incident investigation procedures

- **12.03.2** (1) All accidents and serious incidents of which the Director is notified in terms of regulations 12.02.1 and 12.02.2, shall be investigated by an investigator-in-charge.
- (2) All incidents, other than serious incidents referred to in sub-regulation (1), may be investigated by an investigator-in-charge.
- (3) An accident or incident investigation shall be carried out by the investigator-in-charge, in accordance with the requirements for and the rules, procedures and standards as prescribed in Document SA-CATS 12.
- (4) Any person required by the investigator-in-charge to render assistance or furnish the information which the investigator-in-charge may deem necessary for the investigation of an accident or incident, shall be obliged to render such assistance or furnish such information.

Retention of objects for purposes of investigation or inquiry

12.03.3 Any item or wreckage of an aircraft involved in an accident or incident, or any part or component thereof, or anything transported therein, may be retained by the investigator-incharge until no longer required for the purpose of an investigation, including an investigation following on a reopening referred to in regulation 12.05.3, or for an inquiry by a Commission of inquiry in terms of section 69 of the Act, whereupon such wreckage, or part or component thereof, shall be discarded or destroyed, unless a person having a right to such item, or part or component thereof, has informed the Director in writing, within 60 days of the date of such accident or incident, that such item or component or part be returned to him or her after the completion of the investigation or inquiry.

SUBPART 4: SCENE OF AN ACCIDENT

Guarding of aircraft involved in accident

- **12.04.1** Where an accident occurs within the Republic, the PIC of the aircraft involved in the accident, or if he or she is killed or incapacitated, a flight crew member, or if there are no surviving flight crew members, or if they are incapacitated, the operator or owner of such aircraft or where the accident occurs on an aerodrome, the aerodrome manager, shall –
- (a) pending the arrival of a police guard, take such steps which may be necessary to prevent any interference with the aircraft, the wreck or wreckage and anything transported therein and any marks resulting from the accident which may be of assistance in an investigation;

(b) forthwith arrange with a member of the South African Police Service to guard the aircraft, the wreck or wreckage and anything transported therein and any marks resulting from the accident which may be of assistance in an investigation.

Access to the scene of accident

12.04.2 (1) No person other than –

- (a) a member of the rescue service;
- (b) a *pro tem* investigator;
- (c) an investigator;
- (d) an accredited representative;
- (e) an advisor;
- (f) a member of the South African Police Service; or
- (g) any other person authorised by the Director, after consultation with the investigator-in-charge, shall, until such time as the investigator-in-charge otherwise determines, have access to an aircraft which has been involved in an accident or to the wreck or wreckage and any marks resulting from the accident which may be of assistance in an investigation.
- (2) Every person permitted by the provisions of sub-regulation (1) or authorised in terms thereof to have access to an aircraft which has been involved in an accident or to the wreck or wreckage or to places where marks resulting from the accident occur which may be of assistance in an investigation, shall be subject to the direction of the investigator-in-charge until the investigation has been completed.

Control of evidence

12.04.3 The aircraft, the wreck or wreckage and anything transported therein and any marks resulting from the accident which may be of assistance in an investigation, shall remain under the control of the investigator-in-charge until released by such investigator-in-charge.

Interference with objects and marks at scene of accident

- **12.04.4** (1) Subject to the provisions of this part, no person shall interfere with an aircraft which has been involved in an accident, the wreck or wreckage, a part or component thereof or anything transported therein or any marks resulting from the accident which may be of assistance in an investigation
 - (a) until authorised to do so by the investigator-in-charge; and
 - (b) until, in the case of an aircraft which must be cleared by a customs officer by virtue of the provisions of the Customs and Excise Act, 1964 (Act No. 91 of 1964), clearance has been issued or permission granted by such officer.
- (2) The provisions of sub-regulation (1) shall not prevent any action necessary for
 - (a) the rescue or extrication of persons or animals from the aircraft or the wreck;
 - (b) the reasonable protection of the aircraft, the wreck or wreckage from destruction by fire or other causes;
 - (c) the safeguarding by the owner, operator or police guard of precious metals, jewellery or valuables;

- (d) the prevention of danger or removal of an obstruction to other aircraft, other means of transport or to the public; and
- (e) the removal of the aircraft, any part or component thereof or anything transported therein to a safe place, when in water or otherwise endangered.

Removal of damaged or disabled aircraft

12.04.5 Subject to the conditions which the Director may determine, a person authorised by the Director for this purpose, may direct any person to move an aircraft which is damaged or disabled or to move any part thereof or any cargo or thing carried therein, to another place, at the expense of the owner or operator of the aircraft.

Non-disclosure of records

12.04.6 (1) The following records shall not be made available for purposes other than accident or incident investigations, unless a court of law determines that their public disclosure outweighs the adverse domestic and international impact such action may have on that or future investigations, taking into account all applicable law:

- (a) All statements taken from persons by the investigator/s of the investigation team in the course of the investigation;
- (b) all records of communications between persons having been involved in the operation of the aircraft;
- (c) names, medical and private information regarding persons involved in the accident or incident;
- (d) cockpit voice recordings and transcripts from such recordings;
- (e) recordings and transcriptions of recordings from air traffic control units;
- (f) cockpit airborne image recordings and any part or transcripts from such recordings; and
- (g) opinions expressed in the analysis of information, including information obtained from flight recorders and ATC recordings.
- (2) The records referred to in sub-regulation (1) shall be included in the final report or its appendices only when pertinent to the analysis of the accident or incident.
- (3) Parts of the record not relevant to the analysis shall not be disclosed.

Use of information for internal proceedings

- **12.04.7** Notwithstanding the provisions of regulation 12.04.6, an appropriate authority may authorise the use of the records referred to in regulation 12.04.6(1) except the records mentioned in paragraphs (d) and (f) thereof, for internal proceedings when
 - (a) there is evidence that the occurrence was caused by an act considered, after investigation in accordance with these regulations, to be conducted with intent to cause damage, or conducted with knowledge that damage would probably result, equivalent to reckless conduct, gross negligence or wilful misconduct;

- (b) the appropriate authority considers that circumstances reasonably indicate that the occurrence may have been caused by conduct with intent to cause damage, or conduct with knowledge that damage would probably result, equivalent to reckless conduct, gross negligence or wilful misconduct; or
- (c) a review by the appropriate authority determines that the release of the safety information is necessary for the proper administration of justice, and that its release outweighs the adverse domestic and international impact such release may have on the future availability of safety information.

SUBPART 5: REPORTING AND REOPENING OF INVESTIGATION

Reporting

- **12.05.1** (1) The investigator-in-charge shall, upon completion of an investigation of an accident or incident carried out in terms of subpart 3, report the findings of such investigation to the Director.
- (2) The reporting on an investigation referred to in sub-regulation (1) shall consist of
 - (a) a preliminary report, if necessary in the interests of aviation safety; and
 - (b) a final report which shall be compiled and published in the manner as prescribed in Document SA-CATS 12.
- (3) The Director shall send a copy of the draft Final Report to the State that instituted the investigation and to all States that participated in the investigation, inviting their significant and substantiated comments on the report as soon as possible.
- (4) The Director shall send the draft Final Report of the investigation for comments to:
 - (a) the State of Registry;
 - (b) the State of the Operator;
 - (c) the State of Design; and
 - (d) the State of Manufacture.
- (5) The States referred to in sub-regulations (3) and (4) shall be given a period of 60 days from the date of receipt of the draft Final Report, within which to make comments therein.
- (6) The Director shall give due consideration to any comments received within the period stated in sub-regulation (5) and may either amend the draft Final Report to include the substance of the comments received or, if desired by the State that provided comments, append the comments to the Final Report.
- (7) If the Director receives no comments within the period stated in sub-regulation (5) above, the Director shall prepare the Final Report.

Appeal against findings in investigation

- **12.05.2** (1) Any interested person who feels aggrieved by the findings on an investigation may appeal against such findings to the Director, within 60 days after the publication of such findings.
- (2) An appellant shall deliver an appeal in writing, stating the reasons why in his or her opinion, the findings should be varied or set aside.
- (3) The appellant shall submit a copy of the appeal and any documents or records supporting such appeal, to the investigator-in-charge concerned and shall furnish proof of such submission for the information of the Director,
- (4) The investigator-in-charge concerned must, within 30 days of receipt of the copy of the appeal referred to in sub-regulation (3), deliver his or her written reply to such appeal to the Director.
- (5) The Director must -
 - (a) adjudicate the appeal on the basis of the documents submitted to him or her; or
 - (b) order the appellant and the investigator-in-charge concerned to appear before him or her, either in person or through a representative, at a time and place determined by him or her, to give evidence.
- (6) The Director may confirm, vary or set aside the findings referred to in sub-regulation (1).
- (7) The Director may keep in abeyance an appeal lodged in terms of this regulation if the Director is satisfied that the Minister has applied or intends to apply the provisions of section 69 of the Act.

Reopening of investigation

- **12.05.3** (1) The Director may order the reopening of an investigation
 - (a) of which the findings are set aside in terms of regulation 12.05.2(6):
 - (b) if new and significant information which indicates that the findings on the investigation may be incorrect, becomes available; or
 - (c) if such a reopening is in the interests of aviation safety.
- (2) Any investigation reopened in terms of this regulation shall be conducted in accordance with the provisions of Subpart 3.
- (3) The Director shall not order the reopening of an investigation in terms of this regulation if the Director is satisfied that the Minister has applied or intends to apply the provisions of section 69 of the Act.

SUBPART 6: ACCIDENT PREVENTION MEASURES

Voluntary incident reporting system

- **12.06.01** (1) The Director shall establish a voluntary incident reporting system which shall be non-punitive and afford protection to the source of information.
- (2) The Director shall establish other safety data collection and processing systems to collect safety information that may not be captured by the incident reporting system mentioned in subregulation (1) above.

Database system

- **12.06.2** (1) The Director shall establish an accident and incident database system to facilitate the effective analysis of information obtained, including the information obtained from the incident reporting system.
- (2) The database system referred to in sub-regulation (1) shall be in a standardized format to facilitate data exchange.

Analysis of data

- **12.06.03** (1) The Director shall, following the identification of preventative actions required to address actual or potential safety deficiencies, and as part of the safety program, implement these actions and establish a process to monitor implementation and effectiveness of the processes.
- (2) The Director shall analyse safety information based on risk assessment.
- (3) The Director shall, in the analysis of the information contained in the database, identify safety matters considered to be of interest to other States and forward such safety information to that State as soon as possible.
- (4) The Director shall, if a safety recommendation is addressed to an organization in another State and in addition to safety recommendations arising from accidents and incident investigations, or other sources, including safety studies, forward such recommendation to that State's investigations authority.

Exchange of safety information

12.06.4 The Director shall establish a safety information sharing network among all users of the aviation system and shall facilitate the free exchange of information on actual and potential safety deficiencies.

PART 21: CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS

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SUBPART 1: GENERAL

Applicability

21.01.1 (1) This Part applies to –

- (a) the type certification of products to be manufactured in the Republic;
- (b) the approval of changes to type certificates;
- (c) the type acceptance certification of products to be imported into the Republic;
- (d) the issuing of supplemental type certificates;
- (e) the issuing of production certificates;

- (f) the airworthiness certification of aircraft:
- (g) the approval of parts and appliances to be manufactured in the Republic;
- (h) the approval of parts and appliances to be imported into the Republic;
- (i) the issuing of export airworthiness approvals; and
- (i) the issuing of ZA-TSO authorisations.
- (2) This Part does not apply to
 - (a) hang glider;
 - (b) paraglider;
 - (c) unmanned free balloon;
 - (d) captive balloon;
 - (e) kite;
 - (f) model aircraft;
 - (g) parachute;
 - (h) powered paraglider;
 - (i) rigid airship; or
 - (j) unmanned aerial vehicle.

Types of aircraft

- **21.01.2** (1) For the purposes of this Part, the types of aircraft are
 - (a) gliders, power-assisted gliders, and touring gliders;
 - (b) very light aeroplanes;
 - (c) aeroplanes of normal, utility, acrobatic and commuter categories;
 - (d) aeroplanes of the transport category;
 - (e) rotorcraft of the normal category;
 - (f) rotorcraft of the transport category;
 - (g) manned free balloons; and
 - (h) non-rigid airships.
- (2) The airworthiness design standards for each type of aircraft referred to in sub-regulation (1), are those referred to in regulation 21.02.3.

Reporting of failures, malfunctions and defects

- **21.01.3** (1) The holder of any type certificate, supplemental type certificate, production certificate, ZA-PMA or ZA-TSO authorisation issued in terms of this part, shall report in writing to the Director any failure, malfunction or defect in any product, part or appliance manufactured by such holder which
 - (a) has resulted in any of the occurrences specified in Document SA-CATS 21; or
 - (b) has passed through such, holder's quality assurance system and may result in any of the occurrences specified in Document SA-CATS 21.
- (2) A report referred to in sub-regulation (1) shall include –

- (a) the aircraft serial number;
- (b) if the failure, malfunction or defect is associated with an article approved under ZA-TSO authorisation, the article serial number and model designation;
- (c) if the failure, malfunction or defect is associated with an aircraft engine or aircraft propeller, the engine or propeller serial number;
- (d) the product model;
- (e) an identification, including the part number, of the part, component or system involved; and
- (f) the nature of the failure, malfunction or defect.
- (3) A report referred to in sub-regulation (1) shall be submitted to the Director within 24 hours after the holder has become aware of the failure, malfunction or defect required to be reported: Provided that a report which was due on a Saturday, Sunday or public holiday, may be submitted on the next working day.
- (4) In the event of the investigation of an accident or service difficulty report indicating that a product is unsafe because of a manufacturing or design defect, the holder concerned shall, upon the request of the Director, report to the Director the results of its investigation and any action taken or proposed by such holder to correct such defect.
- (5) If action is required to correct the defect in existing products, the holder concerned shall submit the data necessary for the issuing of an appropriate airworthiness directive, to the Director.

Issuing of airworthiness directives

- **21.01.4** (1) The Director may issue appropriate airworthiness directives in respect of design changes which are necessary to correct the unsafe condition of a product.
- (2) If the Director issues an airworthiness directive for a product, the holder of any certificate for the product type, shall
 - (a) upon the request of the Director, submit appropriate design changes to the Director for approval; and
 - (b) upon approval of the design changes, make the descriptive data covering the changes available to all operators of the product.

Safety inspections and audits

- **21.01.5** (1) An applicant for the issuing of any certificate, approval or authorisation in terms of this Part, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and flight and ground tests which may be necessary to verify the validity of any application made in terms of this part.
- (2) The holder of any certificate, approval or authorisation issued under this part, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this part.

Register of certificates

- **21.01.6** (1) The Director shall maintain a register of all certificates, approvals or authorisations issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the certificate, approval or authorisation;
 - (b) the postal address of the holder of the certificate, approval or authorisation;
 - (c) the date on which the certificate, approval or authorisation was issued; and
 - (d) the nationality of the holder of the certificate, approval or authorisation.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the certificate, approval or authorisation is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: TYPE CERTIFICATES

Categories of type certificates

- **21.02.1** The categories of type certificates are
 - (a) standard category type certificates for a Class I product to be manufactured in the Republic; and
 - (b) restricted category type certificate for a Class I product to be manufactured in the Republic.

Application for type certificate or amendment thereof

- **21.02.2** (1) An application for the issuing of a type certificate for a Class I product or an amendment thereof, shall be
 - (a) made in the prescribed form and manner; and
 - (b) accompanied by -
 - (i) a certified true copy of the approval held by the selected design organisation;
 - (ii) the appropriate fee as prescribed in Part 187;
 - (iii) in the case of an application for an aircraft type, a three-view drawing of the aircraft type and available preliminary basic data;
 - (iv) in the case of an application for an aircraft engine type or an aircraft propeller type, a description of the
 - (aa) design features;
 - (bb) operating characteristics; and
 - (cc) proposed operating limitations; and

- (v) the proposed certification basis.
- (2) An application referred to in sub-regulation (1) shall be valid -
 - (a) in the case of an application for an aeroplane type with a MCM exceeding 5 700 kilograms, for a period of five years;
 - (b) in the case of an application for an aeroplane type with a MCM of 5 700 kilograms or less, for a period of three years;
 - (c) in the case of an application for a rotorcraft type with a MCM exceeding 2 730 kilograms, for a period of five years;
 - (d) in the case of an application for a rotorcraft type with a MCM of 2 730 kilograms or less; for a period of three years,

calculated from the date on which the application is submitted to the Director.

- (3) If a type certificate is not issued within the period referred to in sub-regulation (2), the applicant may
 - (a) submit a new application in accordance with the provisions of sub-regulation (1); or
 - (b) submit an application to extend the original application made in terms of sub-regulation (1), and comply with the appropriate airworthiness design standards referred to in regulation 21.02.3, effective on a date selected by the applicant: Provided that such date of validity precedes the date of the issuing of the type certificate by the appropriate period referred to in sub-regulation (2) in respect of the original application.
- (4) The holder of a standard or restricted category type certificate for a Class 1 product to be manufactured shall pay the annual currency fee as prescribed in Part 187, applicable to the type of certification on the anniversary date of such certificate.

Airworthiness design standards

- **21.02.3** (1) An applicant for the issuing of a type certificate for a Class I product, or an amendment thereof, shall provide the Director with proof that
 - (a) the product complies with the appropriate airworthiness design standards as prescribed in Document SA-CATS 21, in force on the date of application or any later date selected by the applicant in terms of regulation 21.02.2(3)(b);
 - (b) the product complies with the appropriate aircraft noise, fuel venting and engine emission standards referred to in Part 34 or Part 36, as the case may be;
 - (c) the product complies with any special conditions prescribed by the Director in terms of regulation 21.02.13;
 - (d) any airworthiness design standards not complied with, are compensated for by factors providing an equivalent level of safety; and
 - (e) in the case of an aircraft type, no feature or characteristic makes the aircraft type unsafe for the intended use.
- (2) If the applicant selects a later date referred to in sub-regulation (1)(a), the applicant shall provide proof that the product complies with any other airworthiness design standard which the Director determines is directly related.

Type design

21.02.4 An applicant for the issuing of a type certificate for a Class I product, or an amendment thereof, shall –

- (a) provide the Director with a type design consisting of
 - (i) the drawings and specifications necessary to define the configuration and the design features of the product which have been shown to comply with the appropriate airworthiness design standards referred to in regulation 21.02.3;
 - (ii) a list of the drawings and specifications referred to in subparagraph (i);
 - information on dimensions, materials and processes and on methods of manufacture and assembly of the product necessary to ensure the conformity of the product;
 - (iv) the airworthiness limitations specified in the appropriate airworthiness design standards referred to in regulation 21.02.3; and
 - (v) any other data necessary to allow, by comparison, the determination of the airworthiness, noise characteristics, fuel venting and engine emissions, if applicable, of later products of the same type; and
- (b) identify each type design and each variant within the type design.

Inspections and tests

- **21.02.5** (1) An applicant for the issuing of a type certificate for a Class I product, or an amendment thereof, shall inspect and test a product of the type to ensure that
 - (a) the product complies with the appropriate airworthiness design standards referred to in regulation 21.02.3;
 - (b) the product complies with the appropriate aircraft noise, fuel venting and engine emission standards referred to in Part 34 or Part 36, as the case may be;
 - (c) the materials and product conform to the specifications in the type design:
 - (d) all parts in the product conform to the drawings in the type design; and
 - (e) the manufacturing processes, construction and assembly conform to those specified in the type design.
- (2) The applicant shall, after making the inspections and tests referred to in sub-regulation (1)
 - (a) permit the Director to perform any inspection and flight and ground tests which the Director may require;
 - (b) provide proof to the Director that the product complies with the requirements referred to in sub-regulation (1)(c), (d) and (e); and
 - (c) ensure that the product remains unchanged between the time that the product is shown to comply with the requirements referred to in sub-regulation (1)(c), (d) and (e), and the time of presentation to the Director for testing.

Statements of conformity

- **21.02.6** An applicant, for the issuing of a type certificateor an amendment thereof, presenting a product to the Director for the tests referred to in regulation 21.02.5(2), shall provide the Director with a statement of conformity stating that
 - (a) the applicant has complied with the requirements referred to in regulation 21.02.5(1)(c), (d) and (e); and
 - (b) the product complies with the applicable type design.

Flight tests

- **21.02.7** (1) Subject to the provisions of sub-regulations (2) and (3), an applicant for the issuing of a type certificate for an aircraft, or an amendment thereof, shall carry out such flight tests as the Director may require to determine whether
 - (a) the aircraft complies with the appropriate airworthiness design standards referred to in regulation 21.02.3;
 - (b) the aircraft and the aircraft components and equipment are reliable and function properly.
- (2) The applicant shall ensure that, before carrying out any flight tests referred to in sub-regulation (1)
 - (a) the aircraft complies with the structural requirements of the appropriate airworthiness design standards referred to in regulation 21.02.3;
 - (b) the aircraft has undergone the necessary ground inspections and tests; and
 - (c) the aircraft conforms to the type design.
- (3) The flight tests referred to in sub-regulation (1) shall be carried out in accordance with the requirements as prescribed in Document SA-CATS 21.

Issuing of type certificate

- **21.02.8** (1) An application in terms of regulation 21.02.2 shall be granted and a type certificate for a Class I product issued if
 - (a) the applicant complies with the provisions of regulations 21.02.3 to 21.02.7 inclusive; and
 - (b) the inspection and testing of the product confirms that the product complies with the appropriate airworthiness design standards referred to in regulation 21.02.3.
- (2) A type certificate may be issued in both the standard and restricted categories referred to in regulation 21.02.1 if the provisions of regulations 21.02.3 to 21.02.7 inclusive for each category are complied with.
- (3) A restricted category type certificate shall specify the operational purposes for which the product is certificated.
- (4) A type certificate shall be issued in the prescribed form .

Privileges of holder of type certificate

- **21.02.9** The holder of a type certificate shall be entitled to
 - (a) upon compliance with the appropriate requirements prescribed in subpart 7, obtain a production certificate for the type certificated product concerned;
 - (b) obtain approval of replacement parts for such product;
 - (c) in the case of an aircraft, upon compliance with the appropriate requirements prescribed in subpart 8, obtain a certificate of airworthiness; and
 - (d) in the case of an aircraft engine or propeller, obtain approval for the installation thereof on a certificated aircraft.

Period of validity

- **21.02.10** (1) A type certificate shall be valid until it is surrendered by the holder thereof, or is suspended by an authorised officer or inspector, or cancelled by the Director.
- (2) The holder of a type certificate which is suspended, shall forthwith produce the type certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a type certificate which is cancelled, shall, within 30 days from the date on which the type certificate is cancelled, surrender such type certificate to the Director.

Transferability

- **21.02.11** The holder of a type certificate shall, before transferring the type certificate
 - (a) notify the Director in writing, of the name and address of
 - (i) the transferee; and
 - (ii) the subsequent selected design organisation; and
 - (b) produce the type certificate to the Director for amendment.

Special conditions

- **21.02.12** The Director may prescribe special conditions for a Class I product to establish a level of safety equivalent to the appropriate airworthiness design standards referred to in regulation 21.02.3, if the Director determines that the airworthiness design standards do not contain adequate or appropriate safety levels because
 - (a) the product has new or unusual design features relative to the design practices on which the appropriate airworthiness design standards are based; or
 - (b) the intended use of the product is unconventional.

Duties of holder of type certificate

21.02.13 The holder of a type certificate shall –

- (a) keep the original type certificate in a safe place and produce such certificate to an authorised officer, inspector or authorised person for inspection if so requested by such inspector:
- (b) retain all relevant design information, drawings, test reports and inspection records of the product for a period of two years from the date on which the last example of the product has been permanently withdrawn from service;
- (c) produce the design information, drawings, test reports and inspection records to an authorised officer, inspector or authorised person for inspection if so requested by such inspector;
- (d) provide at least one set of instructions for safe operation and continued airworthiness, prepared in accordance with the appropriate airworthiness design standards referred to in regulation 21.02.3, to each purchaser of the product, upon its delivery, or upon the issuing of the first standard certificate of airworthiness for the product concerned, whichever occurs later;
- (e) make the instructions referred to in paragraph (d), and any changes to the instructions, available to any other person required to comply with the instructions;
- (f) develop and maintain a system for receiving and analysing information relating to defects in the product type;
- (g) inform each owner of a product of the same type of the details of the system developed according to the provisions of paragraph (f);
- (h) generate and update a flight manual for the product;
- (i) report to the Director any failure, malfunction or defect in accordance with the provisions of regulation 21.01.3.

SUBPART 3: CHANGES TO TYPE CERTIFICATES

Changes in type design

21.03.1 The changes in type design for products are –

- (a) a minor change;
- (b) a major change;
- (c) an acoustical change; and
- (d) an emission change.

Reporting of minor changes in type design

21.03.2 All minor changes in a type design shall be reported in writing to the Director by the holder of a type certificate.

Approval of major changes in type design

21.03.3 (1) The holder of a type certificate who applies for the approval of a major change in a type design, shall submit to the Director substantiating data and necessary descriptive data for inclusion in the type design.

- (2) Approval of a major change in the type design of an aircraft engine shall be limited to the specific engine configuration upon which the change is made, unless the applicant
 - (a) identifies in the necessary descriptive data for inclusion in the type design the other configurations of the same engine type for which approval is requested; and
 - (b) shows that the change is compatible with such other configurations.

Required design changes

- **21.03.4** (1) In the event of the Director issuing an airworthiness directive, the holder of the type certificate for the product concerned shall
 - (a) if design changes are necessary to correct the unsafe condition of such product, submit the appropriate design changes and substantiation data to the Director for approval, when required to do so; and
 - (b) upon approval of the design changes, make available the descriptive data covering the changes to all operators of products previously certificated under the type certificate.
- (2) In a case where there are no current unsafe conditions, but the Director or the holder of the type certificate finds through service experience that changes in type design will enhance the safety of the product, the holder of the type certificate may submit appropriate design changes and substantiation data for approval.
- (3) Upon approval of the design changes referred to in sub-regulation (2), the holder of the type certificate shall make available information on the design changes to all operators of the same type of product.

Airworthiness design standards

21.03.5 An applicant for the approval of a change to a type certificate shall comply with the appropriate airworthiness design standards referred to in regulation 21.02.3.

SUBPART 4: TYPE OF ACCEPTANCE CERTIFICATES

Categories of type acceptance certificates

- **21.04.1** The categories of type acceptance certificates are
 - (a) standard category type acceptance certificate for a Class I product to be imported into the Republic; and
 - (b) restricted category type acceptance certificate for a Class I product to be imported into the Republic.

Application for type acceptance certificate

- **21.04.2** An application for the issuing of a type acceptance certificate for a Class 1 product shall be
 - (a) made in the prescribed form and manner; and

- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof of compliance with the provisions of regulations 21.04.3 and 21.04.4.

Airworthiness design standards

21.04.3 An applicant for the issuing of a type acceptance certificate for a Class I product shall provide the Director with proof that –

- (a) the product complies with the appropriate airworthiness design standards referred to in regulation 21.02.3, effective at the date assigned in the foreign type certificate or an equivalent document, unless another date is specified by the Director;
- (b) the product complies with any special conditions prescribed by the Director in terms of regulation 21.02.13;
- (c) any airworthiness design standards not complied with are compensated for by factors providing an equivalent level of safety; and
- (d) feature or characteristic of the product makes it safe for the intended use.

Data requirements

21.04.4 (1) An applicant for the issuing of a type acceptance certificate for a Class I product shall provide the Director with –

- (a) proof that the type design has been approved by the appropriate authority of the exporting State, by way of a type certificate or an equivalent document;
- (b) details of the airworthiness design standards complied with, for the issuing of the type certificate referred to in paragraph (a), including
 - (i) the airworthiness design standards;
 - (ii) the effective date of such standards:
 - (iii) any special conditions imposed under the foreign type certification;
 - (iv) any requirements not complied with and any compensating factors providing an equivalent level of safety; and
 - (v) any airworthiness limitations;
- (c) a list identifying the data submitted for the issuing of the type certificate referred to in paragraph (a), showing compliance with the appropriate airworthiness design standards;
- (d) a certified true copy of the flight manual approved under a foreign type certificate or, if the appropriate design standards do not require a flight manual to be provided, a flight manual which complies with the standards as prescribed in Document SA-CATS 21;
- (e) the illustrated parts catalogue; and
- (f) if required by the Director
 - (i) the maintenance manual for the product;
 - (ii) current service information issued by the manufacturer of the product; and
 - (iii) proof that the manufacturer has agreed to provide the Director with a certified true copy of all amendments and re-issues of the documents referred to in paragraph (d), (e) and (f).

(2) The Director may specify the range of serial numbers or models of products to which the application relates, or redefine the applicability of the certificate if the provisions of this regulation and regulation 21.04.3 are complied with in respect of any additional product.

Issuing of type acceptance certificate

- **21.04.5** (1) An application in terms of regulation 21.04.2 shall be granted and a type acceptance certificate for a Class I product issued in the prescribed form, if the applicant complies with the provisions of regulations 21.04.3 and 21.04.4.
- (2) A type acceptance certificate may be issued in both the standard and restricted categories referred to in regulation 21.04.1, if the provisions of regulations 21.04.3 and 21.04.4 for each category are complied with.
- (3) A restricted category type acceptance certificate shall specify the operational purposes for which the product is certificated.

Period of validity

- **21.04.6** (1) A type acceptance certificate shall be valid until it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) The holder of a type acceptance certificate which is suspended, shall forthwith produce the type acceptance certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a type acceptance certificate which is cancelled, shall, within 30 days from the date on which the type acceptance certificate is cancelled, surrender such type acceptance certificate to the Director.

Duty of holder of type acceptance certificate

21.04.7 The holder of a type acceptance certificate shall keep the original type acceptance certificate in a safe place and produce such certificate to an authorised officer, inspector or authorised person for inspection if so requested by such inspector.

SUBPART 5: SUPPLEMENTAL TYPE CERTIFICATES

Requirements for supplemental type certificate

- **21.05.1** (1) Any person who is not the holder of a type certificate and who alters a product by introducing any change in the type design, but not great enough to require a new application for a type certificate, shall apply to the Director for the issuing of a supplemental type certificate.
- (2) An applicant for the issuing of a supplemental certificate shall prove to the Director that –

- (a) the altered product complies with the appropriate airworthiness design standards referred to in regulation 21.02.3;
- (b) in the case of an acoustical change, the altered product complies with the appropriate noise standards as prescribed in Part 36; and
- (c) in the case of am emission change, the altered product complies with the appropriate emission standards as prescribed in Part 34.
- (3) An applicant for the issuing of a supplemental type certificate shall comply with the provisions of regulations 21.02.5 and 21.02.6 in respect of each change in type design.
- (4) For the purposes of this regulation the holder of a type certificate may apply for the amendment of the type certificate in terms of subpart 2.

Application for supplemental type certificate

- **21.05.2** An application for the issuing of a supplemental type certificate shall be
 - (a) made in the prescribed form and manner; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof of compliance with the provisions of regulation 21.05.1.

Issuing of supplemental type certificate

21.05.3 An application in terms of regulation 21.05.2 shall be granted and a supplemental type certificate issued in the prescribed form, if the applicant complies with the requirements prescribed in regulation 21.05.1.

Privileges of holder of supplemental type certificate

21.05.4 The holder of a supplemental type certificate shall be entitled to –

- (a) in the case of an aircraft, upon compliance with the appropriate requirements prescribed in subpart 8, obtain a certificate of airworthiness; and
- (b) in the case of any other product, obtain approval for the installation of such product on a certificated aircraft; and
- (c) upon compliance with the appropriate requirements prescribed in subpart 7, obtain a production certificate for the change in the type design approved by the supplemental type certificate.

Period of validity

21.05.5 (1) A supplemental type certificate shall be valid until it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.

- (2) The holder of a supplemental type certificate which is suspended, shall forthwith produce the supplemental type certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a supplemental type certificate which is cancelled, shall, within 30 days from the date on which the supplemental type certificate is cancelled, surrender such supplemental type certificate to the Director.

Duty of holder of supplemental type certificate

21.05.6 The holder of a supplemental type certificate shall keep the original supplemental type certificate in a safe place and produce such certificate to an authorised officer, inspector or authorised person for inspection if so requested by such inspector.

SUBPART 6: PRODUCTION UNDER TYPE CERTIFICATE

Production under type certificate

- 21.06.1 The manufacturer of a product being manufactured under a type certificate only shall -
 - (a) determine that each completed product conforms to the applicable type design and is in a condition for safe operation prior to submitting statements of conformity to the Director;
 - (b) unless otherwise authorised by the Director, establish and maintain a production inspection system for products manufactured more than six months after the date on which the type certificate was issued, to ensure that such products conform to the type design and are in condition for safe operation; and
 - (c) upon the establishment of the production inspection system referred to in paragraph (b), submit to the Director a manual which describes such system as well as the procedures for making the determinations referred to in regulation 21.06.2(2).

Production inspection system

- **21.06.2** (1) For the purposes of regulation 21.06.1(c), the manufacturer shall establish a Materials Review Board and materials review procedures.
- (2) The procedures for making determinations shall be as prescribed in Document SA-CATS 21.
- (3) The composition of the Materials Review Board and its powers and duties, shall be as prescribed in Document SA-CATS 21.

Tests for aircraft

21.06.3 The manufacturer of an aircraft being manufactured under a type certificate only shall establish a production flight test procedure as prescribed in Document SA-CATS 21, according to which the aircraft so manufactured, shall be flight tested.

Tests for aircraft engines

21.06.4 The manufacturer of an aircraft engine being manufactured under a type certificate only shall subject each engine other than a rocket engine for which such manufacturer shall establish a sampling technique, to a test run as prescribed in Document SA-CATS 21.

Tests for propellers

21.06.5 The manufacturer of propellers being manufactured under a type certificate only shall give each variable pitch propeller a functional test to determine if the propeller operates properly throughout the normal range of operation.

Statement of conformity

- **21.06.6** (1) The manufacturer of a product being manufactured under a type certificate only shall submit to the Director, a statement of conformity—
 - (a) upon the initial transfer of the ownership of the product manufactured under the type certificate; or
 - (b) upon application for the original issuing of
 - (i) in the case of an aircraft, a certificate of airworthiness; or
 - (ii) in the case of an aircraft engine or propeller, an airworthiness approval tag.
- (2) The statement of conformity shall
 - (a) include -
 - (i) for each product, a statement that the product conforms to its type certificate and is in a condition for safe operation;
 - (ii) for each aircraft, a statement that the aircraft has been tested in accordance with the provisions of regulation 21.06.3;
 - (iii) for each aircraft engine, a statement that the engine has been tested in accordance with the provisions of regulation 21.06.4; and
 - (iv) for each variable pitch propeller, a statement that the propeller has been tested in accordance with the provisions of regulation 21.06.5; and
 - (b) be signed by the person authorised by the manufacturer to issue statements of conformity.

SUBPART 7: PRODUCTION CERTIFICATES

Requirements for production certificate

- **21.07.1** Any manufacturer who has been approved by the Director in terms of Part 148, may apply for the issuing of a production certificate if the manufacturer holds
 - (a) a valid type certificate; or
 - (b) a valid supplemental type certificate, for the product concerned.

Application for production certificate or amendment thereof

21.07.2 An application for the issuing of a production certificate, or an amendment thereof, shall be –

- (a) made in the prescribed form and manner; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) data describing the inspection and test procedures necessary to ensure that each article produced conforms to the type design and is in a condition for safe operation;
 - (iii) a description of inspection procedures for raw materials, purchased items, and parts and assemblies produced by any partner or subcontractor, including methods used to ensure acceptable quality of parts and assemblies which cannot be completely inspected for conformity when delivered by the partner or subcontractor to the applicant.;
 - (iv) a description of the methods used for production inspection of individual parts and complete assemblies, including
 - (aa) the identification of any special manufacturing processes involved;
 - (bb) the means used to control the processes;
 - (cc) the final test procedure for the complete product, and
 - (dd) in the case of an aircraft, a copy of the applicant's production flight test procedures and checkoff list;
 - (v) an outline of the materials review system, including the procedure for recording review board decisions and disposing of rejected parts;
 - (vi) an outline of a system for informing the personnel responsible for inspections of current changes in the engineering drawings, specifications and quality control procedures:
 - (vii) a list or chart showing the location of all inspection stations; and
 - (viii) the terms of approval referred to in regulation 21.07.4, for which application is being made.

Issuing of production certificate

- **21.07.3** (1) An application in terms of regulation 21.07.2 shall be granted and a production certificate issued in the prescribed form if the applicant complies with the requirements prescribed in regulation 21.07.1.
- (2) The Director may authorise more than one type certificated product to be manufactured under the terms of approval referred to in regulation 21.07.4, if the products have similar production characteristics.

Terms of approval

21.07.4 The terms of approval shall –

- (a) be issued as part of the production certificate;
- (b) specify the type certificated product to be manufactured; and
- (c) contain a production limitation record, listing the type certificate of each product which the holder of the production certificate is authorised to manufacture.

Duties of holder of production certificate

21.07.5 The holder of a production certificate shall –

- (a) display the certificate in a prominent place at such holder's manufacturing facility for the product concerned and, if a copy of the certificate is displayed, shall produce the original certificate to an authorised officer, inspector or authorised person if so requested by such inspector; and
- (b) maintain the quality control of each product which such holder is authorised to manufacture, in conformity with the data and procedures approved by the Director for such certificate.

Privileges of holder of production certificate

- **21.07.6** The holder of a production certificate shall be entitled to
 - (a) in the case of an aircraft, obtain a certificate of airworthiness; or
 - (b) in the case of any other product, obtain approval for installation on certificated aircraft .

Transferability and period of validity

- 21.07.7 (1) A production certificate issued in terms of regulation 21.07.3 shall -
 - (a) not be transferable; and
 - (b) be valid until it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) The holder of a production certificate which is suspended, shall forthwith produce the certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a production certificate which is cancelled, shall, within 30 days from the date on which the certificate is cancelled, surrender such certificate to the Director.

SUBPART 8: CERTIFICATES OF AIRWORTHINESS

Categories of certificates of airworthiness

- **21.08.1** (1) The categories of certificates of airworthiness are
 - (a) a standard category certificate of airworthiness;
 - (b) a special category certificate of airworthiness.

- (2) A standard certificate of airworthiness may be issued to aircraft in the specific operational category provided the aircraft meets the requirements of the specific regulatory part and may consist of the following operation categories:
- (a) Non-commercial operations, Part 91;
- (b) Training, Part 141; and
- (c) Commercial operations, Parts 121,127, 133, 135, 137 and 138.
- (3) A special airworthiness certificate may be issued to an aircraft that does not fully meet the requirements of the State of Design for a standard airworthiness certificate. The types of special category certificate of airworthiness shall consist of
 - (a) an experimental certificate or a special flight permit; and
 - (b) a restricted category certificate of airworthiness.
- (4) An aircraft may be issued with a standard category certificate of airworthiness which includes limitations that otherwise would require it to be issued with a special category certificate of airworthiness, provided the aircraft
 - (a) can be converted from one configuration to another by removing or adding equipment by simple mechanical means, and complies with the requirements prescribed for flight operations in that configuration and the particular operation; and
 - (b) after having been operated in terms of Part 137, is inspected for release to service according to the provisions of Part 43, each time the aircraft is restored to a configuration permitting the carriage of passengers in terms of Part 121, Part 127, Part 135 or Part 138, as the case may be, unless the Director finds this unnecessary for safety in a particular case.
- (5) The holder of a standard restricted or special category of airworthiness certificate shall pay the annual currency fee as prescribed in Part 187, applicable to the type of certificate of airworthiness, on the anniversary date of such certificate.

Requirements for certificate of airworthiness

- **21.08.2** No aircraft shall be operated in the Republic unless such aircraft has been issued with a certificate of airworthiness and unless the conditions on which such certificate was issued or rendered effective are complied with.
- (2) The Director shall issue certificate of airworthiness for aircraft registered in the Republic based on satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements (type certificate).

Application for certificate of airworthiness or amendment thereof

- **21.08.3** (1) Any owner of an aircraft, or his, her or its authorised representative, may apply for the issuing of a certificate of airworthiness for the aircraft, or an amendment thereof.
- (2) An application for the issuing of a standard certificate of airworthiness, or an amendment thereof, shall be
 - (a) made in the form and manner prescribed by the Director; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof of compliance with the provisions of regulation 21.08.4.
- (3) An application for the issuing of an experimental certificate, or an amendment thereof, shall be
 - (a) made in the form and manner prescribed by the Director; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof of compliance with the provisions of regulation 21.08.5.
- (4) The holder of a standard restricted or special category of airworthiness certificate shall pay the annual currency fee as prescribed in Part 187, applicable to the type of certificate of airworthiness, on the anniversary date of such certificate.

Requirements for standard category certificate of airworthiness

- **21.08.4** (1) An applicant for the issuing of a standard category certificate of airworthiness for an aircraft, or an amendment thereof, shall provide the Director with proof that
 - (a) in the case of a new aircraft type manufactured by the holder of a manufacturing organisation approval issued under Part 148
 - (i) the applicant is the manufacturer; and
 - (ii) the applicant has issued a statement of conformity in terms of regulation 21.02.6; or
 - (b) in the case of an imported aircraft
 - (i) a standard category type acceptance certificate has been issued for the aircraft type in terms of regulation 21.04.5; and
 - (ii) a statement of conformity has been issued by, or in accordance with the laws of, the appropriate authority of the exporting State.
- (2) The applicant shall, in addition to the provisions of sub-regulation (1), provide the Director with proof that
 - (a) the aircraft conforms to an appropriate type certificate or type acceptance certificate;
 - (b) any modification to the aircraft conforms to the design changes approved for the type;

- (c) the aircraft complies with the appropriate airworthiness directives issued in terms of regulation 21.01.4;
- (d) the aircraft is issued with the appropriate flight manual, and any logbooks, repair and alteration forms and documents which the Director may require; and
- (e) the aircraft is in a condition for safe operation.

Carrying out test flights in certain circumstances

21.08.5 An aircraft required to be issued or re-issued with a certificate of airworthiness or if such certificate of airworthiness is required to be rendered effective may be test flown with the written permission of the owner or operator provided that —

- (a) the aircraft has been issued with or possesses a valid South African certificate of registration;
- (b) an application form, as laid down by SA-CATS 21 requesting the issue of a certificate of airworthiness has been lodged with the Director;
- (c) the application is accompanied by the fee prescribed in Part 187 for the issue of the above-mentioned certificate:
- (d) where the certificate of airworthiness has .expired due to an imposed calendar limit and such certificate needs to be re-issued, the requirements pertaining to the currency fee prescribed in the aforementioned regulations are to be met;
- (e) the aircraft is to be certified safe for the intended flight in the airframe logbook, prior to the flight by the holder of a valid, suitably rated AME's licence issued in terms of Part 66, or by such person who is a holder of valid certification, on type, issued in terms of Part 145 of these regulations; and
- (f) the aircraft has to make its first landing at the point of departure.

Requirements and application for experimental certificate

- **21.08.6** (1) An experimental certificate for an aircraft may be issued for the purposes of
 - (a) showing compliance with the regulations with specific reference to the conducting of flight tests and other operations to show compliance with the airworthiness regulations including
 - (i) flights to show compliance for issuance of a type certificate or
 - (ii) supplemental type certificate;
 - (iii) flights to substantiate major design changes; and
 - (iv) flights to show compliance with the function and reliability requirements of the regulations; or
 - (b) research and development relating to the testing of new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operating techniques, or new uses for aircraft.
- (2) An experimental certificate for a non-type certificated aircraft is issued as a proving flight authority as prescribed in Part 24 of the regulations.

- (3) An application for the issue of an experimental certificate or an amendment thereto, other than for a non-type certificated aircraft, shall be made in the prescribed form and manner and shall include
 - (a) a statement specifying the purposes of the test flights;
 - (b) sufficient data to identify the aircraft;
 - (c) the estimated time and duration or number of the test flights;
 - (d) details of the area over which the tests will be conducted;
 - (e) proof that the aircraft complies with any design criteria or design changes necessary for the safe operation of the aircraft that the Director may require:
 - (f) flight manuals, maintenance manuals, or such documents relating to the operation of the aircraft that the Director may require, if such manuals or documents already have been developed;
 - (g) except for aircraft converted from a previously type-certificated aircraft without appreciable change in the external configuration or silhouette, three-view drawings or three-dimensional views of the aircraft; and
 - (h) any other information that the Director may require in the interest of aviation safety.
- (4) An application for the issue of a proving flight authority for a non-type certificated aircraft or an amendment thereto shall be made in accordance with the provisions of Part 24.
- (5) An experimental certificate issued in terms of this Part shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State, permission of the responsible aeronautical authority is required.

Requirements and application for special flight permit

- **21.08.7** (1) A special flight permit for an aircraft may be issued for the purposes of
 - (a) ferrying an aircraft where the certificate of airworthiness has become invalid due to the aircraft no longer meeting its airworthiness standard to a base where maintenance can be carried out;
 - (b) delivering or exporting the aircraft;
 - (c) evacuating the aircraft from areas of impending danger;
 - (d) carrying out a flight or a series of flights while the aircraft does not conform to the appropriate airworthiness design standards referred to in regulation 21.02.3; or
 - (e) operation of an aircraft at a mass in excess of its maximum certificated take-off mass for flights beyond the normal range over water or over land areas where adequate landing facilities or appropriate fuel is not available. The excess mass that may be authorised under this sub-regulation is limited to the additional fuel, fuel-carrying facilities, and navigation and emergency equipment necessary for the flight.
- (2) A special flight permit for a non-type certificated aircraft is issued as an authority to fly as prescribed in Part 24 of the regulations.
- (3) An application for the issuing of a special flight permit for an aircraft or an amendment thereto, other than for a non-type certificated aircraft, shall be made in the prescribed form and manner and be accompanied by a statement containing –

- (a) the purpose of the flight(s);
- (b) the proposed itinerary;
- (c) details of any non-compliance with the appropriate airworthiness design standards referred to in regulation 21.02.3;
- (d) any restriction that the applicant considers necessary for the safe operation of the aircraft; and
- (e) any other information that the Director may require for the purpose of prescribing operating limitations.
- (4) The Director may make, or require the applicant to make appropriate inspections or tests to establish safety aspects.
- (5) The application referred to in sub-regulation (3) shall be accompanied by the appropriate fee as prescribed in Part 187.
- (6) An application for the issue of an authority to fly for a non-type certificated aircraft or an amendment thereto shall be made in accordance with the provisions of Part 24.
- (7) A special flight permit issued in terms of this Part shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State permission of the responsible aeronautical authority is required.

Special flight permits with continued authorisation

- **21.08.8** (1) Upon application, the Director may issue a special flight permit with a continued authorisation to
 - (a) the holder of an operating certificate for the purpose of ferrying an aircraft that may not meet applicable airworthiness requirements but is capable of safe flight to a base where maintenance or alterations are performed; or
 - (b) the holder of a manufacturing authorisation approval issued in terms of Part 148 for the purpose of
 - (i) flight testing new production aircraft manufactured by such holder; and
 - (ii) conducting customer demonstration flights in new production aircraft that have satisfactorily completed production flight tests.
- (2) The permit issued under this regulation is an authorisation, including conditions and limitations for flight, which is set forth in the operations manual or manual of procedure of the holder of the operating certificate or authorisation approval, as the case may be.
- (3) The permit issued under this Regulation shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State permission of the responsible aeronautical authority is required.

Form of certificate of airworthiness

21.08.9 A certificate of airworthiness shall be issued on the prescribed form .

Special flight permits with continuing authorisation

- **21.08.10** The Director may issue a special flight permit with a continuing authorisation to
 - (a) the holder of an operating certificate, for the purpose of flying aircraft to a base where maintenance is to be carried out; and
 - (b) the holder of a manufacturing organisation approval issued in terms of Part 148, for the purpose of flight testing new production aircraft manufactured by such holder.

RVSM approval

- **21.08.11** (1) An airworthiness approval certificate is required for aircraft that are to be operated within RVSM airspace.
- (2) The requirements for such RVSM airworthiness approval certificate are contained in Section 6 of technical standard 91.04.31 of Document SA-CATS 91.
- (3) An application for the issuing of an RVSM approval certificate shall be made to the Director as prescribed in regulation 91.04.31 (3).

Period of validity

- 21.08.12 (1) A certificate of airworthiness shall be valid until
 - (a) it expires, if an expiry date has been determined; or
 - (b) it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) Subject to the provisions of sub-regulation (1), a certificate of airworthiness shall remain valid for as long as
 - (a) the aircraft remains a South African registered aircraft; and
 - (b) in respect of an aircraft with a standard or restricted category certificate of airworthiness, the aircraft is maintained in accordance with the Regulations.
- (3) The holder of a certificate of airworthiness which expires, shall forthwith surrender the certificate to the Director.
- (4) The holder of a certificate of airworthiness which is suspended, shall forthwith produce the certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of a certificate of airworthiness which is cancelled, shall, within 30 days from the date on which the certificate is cancelled, surrender such certificate to the Director.

Transferability

21.08.13 A standard or restricted certificate of airworthiness and an experimental certificate shall be transferred with the aircraft.

Application for reissuing of certificate

- **21.08.14** (1) If a certificate issued under this Part is lost, stolen, damaged or destroyed, the holder thereof, or an AMO approved under Part 145 which is responsible for the servicing and maintenance of the aircraft, may apply to the Director for the issue of a duplicate certificate.
- (2) An application referred to in sub-regulation (1) shall be
 - (a) made in the prescribed form; and
 - (b) accompanied by the appropriate fee as prescribed in Part 187.
- (3) A duplicate of the certificate shall be issued in the prescribed form.

SUBPART 9: APPROVAL OF PARTS AND APPLIANCES

Replacement and modification parts

- **21.09.1** (1) Subject to the provisions of sub-regulation (2), no person shall produce a modification or replacement part for sale for installation on a type certificate product unless such modification or replacement part is produced pursuant to a ZA-PMA issued under this subpart.
- (2) The provisions of sub-regulation (1) shall not apply in respect of
 - (a) parts produced under a type certificate;
 - (b) parts produced by an owner or operator for maintaining its own product;
 - (c) parts produced under ZA-TSO; or
 - (d) standard parts conforming to established civil aviation industry or South African civil aviation specifications.

Inspections and tests

- **21.09.2** (1) An applicant for the issuing of a ZA-PMA shall carry out all inspections and tests which may be necessary to determine
 - (a) compliance with the appropriate airworthiness design standards referred to in regulation 21.02.3
 - (b) that the materials conform to the specifications in the design;
 - (c) that the part conforms to the drawings in the design; and
 - (d) that the manufacturing processes, construction and assembly conform to those processes specified in the design.
- (2) Unless authorised by the Director
 - (a) no part shall be presented to the Director for an inspection or test unless compliance with the provisions of sub-regulation (1)(b) and (d) has been proven for such part; and

- (b) no change shall be made to a part between the time that compliance with the provisions of sub-regulation (1)(b) and (d) is proven for the part, and the time that such part is presented to the Director for the inspection or test.
- (3) The applicant shall establish a manufacturing inspection system to ensure that each completed part conforms to its design data and is safe for installation on appropriate type certified products.

Application for ZA-PMA

- **21.09.3** (1) Any manufacturer who has been approved by the Director in terms of Part 148, may apply for a ZA-PMA.
- (2) An application for the issuing of a ZA-PMA shall be
 - (a) made in the prescribed form and manner; and
 - (b) accompanied by -
 - (i) drawings and specifications necessary to show the configuration of the part;
 - (ii) information on dimensions, materials and processes necessary to define the structural strength of the part;
 - (iii) test reports and computations necessary to show that the design of the part complies with the airworthiness design standards referred to in regulation 21.02.3 applicable to the product on which the part is to be installed;
 - (iv) if the design of the part was obtained by a licensing agreement, a copy of such agreement; and
 - (v) the appropriate fee as prescribed in Part 187.

Issuing of ZA-PMA

- **21.09.4** (1) Subject to the provisions of sub-regulation (2), an application in terms of regulation 21.09.3 shall be granted and a ZA-PMA issued if
 - (a) the Director is satisfied, upon examination of the design and the results of all inspections and tests, that the design complies with the airworthiness design standards referred to in regulation 21.02.3, applicable to the product on which the part is to be installed; and
 - (b) the applicant submits a statement certifying that the manufacturing inspection system referred to in regulation 21.09.2(3), has been established.
- (2) The Director shall not issue a ZA-PMA if the manufacturing facility for the part is located outside the Republic, unless the Director is satisfied that the location of such a facility will not impede the administration of the appropriate airworthiness requirements prescribed in this part.

Duties of holder of ZA-PMA

- 21.09.5 The holder of a ZA-PMA shall
 - (a) maintain the manufacturing inspection system referred to in regulation 21.09.2(3);

- (b) notify the Director in writing, within 14 days from the date on which the manufacturing facility for the part concerned, was relocated or expanded to include additional facilities at other locations, of such relocation or expansion; and
- (c) determine that each completed part conforms to the approved design data and is safe for installation on type certificated products.

Transferability and period of validity

- **21.09.6** (1) A ZA-PMA issued in terms of regulation 21.09.4 shall
 - (a) not be transferable; and
 - (b) be valid until it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) The holder of a ZA-PMA which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a ZA-PMA which is cancelled, shall within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

SUBPART 10: APPROVAL OF PARTS AND APPLIANCES: IMPORT

Approval

- **21.10.1** (1) Any part or appliance manufactured in a foreign State with which the South African government has entered into an agreement for the acceptance of the part or appliance for export and import, shall be deemed to comply with the requirements for approval prescribed in this part, if the appropriate authority of the State in which the part or appliance was manufactured, issues an export certificate of airworthiness certifying that such part or appliance complies with those requirements, unless the Director is satisfied, based on the technical data submitted in terms of sub-regulation (2), that the part or appliance is otherwise not consistent with the airworthiness requirements prescribed in this part.
- (2) An applicant for the approval of a part or appliance shall, upon request by the Director, submit to the Director any technical data concerning the part or appliance.

SUBPART 11: EXPORT AIRWORTHINESS APPROVALS

Export airworthiness approvals

- **21.11.1** (1) An export airworthiness approval for
 - (a) a Class I product, shall be issued in the form of an export certificate of airworthiness; and
 - (b) a Class II or a Class III product, shall be issued in the form of an export airworthiness approval tag.

- (2) An export airworthiness approval may be issued for
 - (a) any new aircraft other than an aircraft referred to in paragraph (b), which has been assembled and flight tested, and any other Class I product located in the Republic;
 - (b) any small aeroplane, glider or normal category rotorcraft which has been type certificated and manufactured under a production certificate;
 - (c) any used aircraft with a valid certificate of airworthiness, or other Class I product which has been maintained in accordance with the provisions of Part 43 and is located in a foreign State, if the Director is satisfied that the location does not impede the administration of the provisions of this Part;
 - (d) any Class II or Class III product manufactured and located in the Republic.

Application for export airworthiness approval

- **21.11.2** (1) Any exporter or his, her or its authorised representative may apply for an export airworthiness approval for a Class I or a Class II product.
- (2) Any manufacturer who has been approved by the Director in terms of Part 148, may apply for an export airworthiness approval for a Class III product if the manufacturer holds for such product
 - (a) a ZA-PMA; or
 - (b) a ZA-TSO authorisation.
- (3) An application for the issuing of an export airworthiness approval for a Class I, a Class II or a Class III product shall be -
 - (a) made in the prescribed form and manner; and
 - (b) accompanied by -
 - (i) a written statement from the appropriate authority of the importing State that such authority will validate the export airworthiness approval if the product being exported is
 - (aa) an aircraft manufactured outside the Republic and being exported to a foreign State with which the South African government has entered into a reciprocal agreement concerning the recognition of export airworthiness approvals:
 - (bb) an unassembled aircraft which has not been flight-tested.;
 - (cc) a product which does not comply with the requirements referred to in regulation 21.11.3(1), (2) or (3), as the case may be, for the issuing of an export airworthiness approval, in which case the written statement shall contain a list of those requirements not complied with;
 - (ii) in the case of an application for the issuing of an export airworthiness approval for a Class I product
 - (aa) a statement of conformity for each new product;
 - (bb) the mass and balance report as prescribed in Document SA-CATS 21;

- (cc) a maintenance manual for each new product if the manual is required by the appropriate airworthiness design standards referred to in regulation 21.02.3;
- (dd) proof of compliance with the appropriate airworthiness directives issued in terms of regulation 21.01.4, including suitable notation of those directives which are not complied with;
- (ee) the AFM if such manual is required by the appropriate airworthiness design standards referred to in regulation 21.02.3, for the particular aircraft;
- (ff) a statement on the date on which ownership passed or is expected to pass to a foreign purchaser; and
- (gg) the date required by the appropriate authority of the importing State; and
- (iii) the appropriate fee as prescribed in Part 187.

Issuing of export airworthiness approval

- **21.11.3** (1) An application in terms of regulation 21.11.2 shall be granted and an export certificate of airworthiness for a Class I product issued on the appropriate form if
 - (a) in the case of a product manufactured in the Republic, the product complies with the requirements prescribed in subpart 8;
 - (b) in the case of a product manufactured outside the Republic, a valid South African certificate of airworthiness has been issued for the product;
 - (c) the product has undergone a mandatory periodic inspection and be approved for release to service; and
 - (d) the requirements prescribed by the appropriate authority of the importing State are complied with.
- (2) An application in terms of regulation 21.11.2 shall be granted and an export airworthiness approval tag for a Class II product issued on the appropriate form if the product
 - (a) is new or has been newly overhauled and conforms to the approved design data;
 - (b) is in a condition for safe operation;
 - (c) is identified with at least -
 - (i) the name;
 - (ii) the part number;
 - (iii) the model and designation; and
 - (iv) the serial number or equivalent, of the manufacturer; and
 - (d) complies with the requirements prescribed by the appropriate authority of the importing State.
- (3) An application in terms of regulation 21.11.2 shall be granted and an export airworthiness approval tag for a Class III product issued on the appropriate form if the product
 - (a) conforms to the approved design data applicable to the Class I or Class II product of which it is part;
 - (b) is in a condition for safe operation; and
 - (c) complies with the requirements prescribed by the appropriate authority of the importing State.

Duties of holder of export airworthiness approval

21.11.4 The holder of an export airworthiness approval shall –

- (a) forward to the appropriate authority of the importing State, all documents and information which may be necessary for the safe operation of the product being exported;
- (b) forward the manufacturer's assembly instructions and a flight test checkoff form approved by the Director, to the appropriate authority of the importing State if unassembled aircraft are being exported:
- (c) remove or cause to be removed any temporary installation incorporated on an aircraft for the purpose of export delivery and restore the aircraft to the approved configuration upon completion of the delivery flight;
- (d) secure all proper foreign entry clearances from all the States involved when conducting sales demonstrations or delivery flights; and
- (e) when ownership of an aircraft passes or has passed to a foreign purchaser
 - (i) request cancellation of the South African registration and certificate of airworthiness; and
 - (ii) submit a statement certifying that the South African nationality and registration marks have been removed from the aircraft.

Inspections and overhauls

- **21.11.5** Each inspection and overhaul required for export airworthiness approval of a Class I and a Class II product shall be carried out and approved by
 - (a) the manufacturer of the product:
 - (b) an AMO approved by the Director in terms of Part 145; or
 - (c) an operator, if the product is maintained under the operator's continued airworthiness maintenance programme and maintenance manual.

SUBPART 12: ZA-TSO AUTHORISATIONS

ZA-TSO markings

21.12.1 No person shall identify an article with ZA-TSO marking unless such person holds a ZA-TSO authorisation and the article complies with the appropriate ZA-TSO performance standards as prescribed in Document SA-CATS 21.

Application for ZA-TSO authorisation

- **21.12.2** (1) An applicant for the issuing of a ZA-TSO authorisation shall be the holder of a manufacturing organisation approval issued in terms of Part 148.
- (2) An application for the issuing of a ZA-TSO authorisation shall be –

- (a) made in the prescribed form and manner; and
- (b) accompanied by -
 - (i) a statement of conformity certifying that the applicant has complied with the requirements prescribed in this subpart and that the article complies with the appropriate ZA-TSO which is valid on the date of application for such article;
 - (ii) one copy of the technical data required in the appropriate ZA-TSO; and
 - (iii) the appropriate fee as prescribed in Part 187.
- (3) If a series of minor changes in accordance with the provisions of regulation 21.12.6 is anticipated, the applicant may include in its application the basic model number of the article and the part number of the components, with brackets after such number, to denote that suffix change letters or numbers or combinations thereof, will be added from time to time.
- (4) The Director may request the applicant to submit such additional information which may be necessary to prove compliance with the requirements prescribed in this subpart.
- (5) If the applicant fails to submit the additional information referred to in sub-regulation (4) within 30 days from the date on which the Director requested such additional information, the application shall be denied and the applicant so notified.

Issuing of ZA-TSO authorisation

- **21.12.3** (1) An application referred to in regulation 21.12.2 shall be granted and a ZA-TSO authorisation issued if
 - (a) the applicant complies with the requirements prescribed in this Subpart;
 - (b) the Director is satisfied that the applicant has the ability to manufacture duplicate articles in accordance with the requirements prescribed in this Subpart; and
 - (c) the issuing of the ZA-TSO authorisation is not contrary to the interests of aviation safety.
- (2) The Director shall consider the application for ZA-TSO authorisation within 30 days after the receipt of the application or, if additional information has been requested, within 30 days from the date of receiving such additional information.
- (3) The Director shall not issue the ZA-TSO authorisation if the manufacturing facility for the article is located outside the Republic, unless the Director is satisfied that the location of such facility will not impede the administration of the appropriate airworthiness requirements prescribed in this part.

Duties of holder of ZA-TSO authorisation

- **21.12.4** A manufacturer who holds a ZA-TSO authorisation for an article shall
 - (a) manufacture the article in accordance with the requirements prescribed in this subpart and the appropriate ZA-TSO;

- (b) conduct all the required tests and inspections and establish and maintain a quality assurance system which is adequate to ensure that the article complies with the requirements referred to in paragraph (a) and is in condition for safe operation;
- (c) prepare and maintain, for each model of each article for which a ZA-TSO authorisation has been issued, a current file of complete technical data and records in accordance with regulation 21.12.7;
- (d) permanently and legibly mark each article to which this regulation applies with -
 - (i) the name and address of the manufacturer;
 - (ii) the name, type, part number or model designation of the article;
 - (iii) the serial number or the date on which the article was manufactured, or both; and
 - (iv) the appropriate ZA-TSO number.

Approval for deviation

- **21.12.5** (1) A manufacturer who requests approval to deviate from any performance standard of a ZA-TSO, shall prove to the Director that the standards from which a deviation is requested, are compensated for by factors or design features providing an equivalent level of safety.
- (2) The written request for approval to deviate, together with all pertinent data, shall
 - (a) if the article is manufactured in the Republic, be submitted to the Director;
 - (b) if the article is manufactured in a foreign State, be submitted through the appropriate authority of such State to the Director; and
 - (c) be accompanied by the appropriate fee as prescribed in Part 187.
- (3) The Director shall grant the approval if the Director is satisfied that the deviation concerned will not jeopardise aviation safety.

Design changes

- **21.12.6** (1) A manufacturer who holds a ZA-TSO authorisation may make minor design changes to an article without the prior approval of the Director if the changed article retains the original model number and such holder submits to the Director any revised data which are necessary for compliance with the provisions of regulation 21.12.2(3).
- (2) If a manufacturer who holds a ZA-TSO authorisation wishes to make major design changes to an article, the manufacturer shall assign a new type or model designation to the article and apply for an authorisation in terms of regulation 21.12.2.
- (3) No design change by any person other than the manufacturer who submitted the statement of conformity for the article, shall be approved under this subpart unless the person seeking the approval is a manufacturer and applies in terms of regulation 21.12.2(2) for a separate ZA-TSO authorisation.

Record-keeping requirements

- **21.12.7** (1) A manufacturer who holds a ZA-TSO authorisation shall, for each article manufactured under the authorisation, keep the following documents at its manufacturing facility:
 - (a) A complete and current technical data file for each type or model article, including design drawings and specifications; and
 - (b) complete and current inspection records reflecting that all inspections and tests required to ensure compliance with the appropriate requirements prescribed in this subpart, have been properly completed and documented.
- (2) A manufacturer who holds a ZA-TSO authorisation shall retain the records referred to in sub-regulation (1)(a) until it no longer manufactures the article concerned: Provided that at such time copies of such records shall be submitted to the Director.
- (3) A manufacturer who holds a ZA-TSO authorisation shall retain the records referred to in sub-regulation (1)(b) for a period of at least five years.

ZA-TSO design approval for appliances: Import

- **21.12.8** (1) An application for the issuing of a ZA-TSO design approval shall be made in the prescribed form and manner and shall be accompanied by
 - (a) proof of compliance with the requirements referred to in sub-regulation (2); and
 - (b) the appropriate fee as prescribed in Part 187.
- (2) A ZA-TSO design approval may be issued for an appliance which is manufactured in a foreign State with which the South African government has entered into an agreement for the acceptance of the appliance for export and import and which is to be imported into the Republic if:
 - (a) the appropriate authority of the State in which the appliance was manufactured, certifies that the appliance has been examined and tested and complies with
 - (i) the applicable ZA-TSO; or
 - the appropriate performance standards prescribed by the appropriate authority of the State in which the appliance was manufactured and any other performance standards as prescribed in Document SA-CATS 21 to provide a level of safety provided by the applicable ZA-TSO; and
 - (b) the manufacturer has submitted to the Director one copy of the technical data required in the appropriate performance standards through the appropriate authority.
- (3) The Director shall issue a ZA-TSO design approval if the applicant complies with the requirements referred to in sub-regulation (2), and shall list any deviation granted to the manufacturer in terms of regulation 21.12.5.
- (4) After the Director has issued a ZA-TSO design approval and the appropriate authority of the State in which the appliance was manufactured, issues an export certificate of airworthiness referred to in regulation 21.10.1, the manufacturer shall be authorised to identify the appliance

in accordance with the ZA-TSO marking requirements referred to in regulation 21.12.4(d) and in the applicable ZA-TSO.

(5) Each appliance shall be accompanied by an export certificate of airworthiness referred to in sub-regulation (3).

Transferability and period of validity

- **21.12.9** (1) A ZA-TSO authorisation issued in terms of regulation 21.12.3 or a letter of ZA-TSO design approval issued in terms of regulation 21.12.8, shall
 - (a) not be transferable; and
 - (b) be valid until it is surrendered by the holder thereof; or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) The holder of a ZA-TSO authorisation or a ZA-TSO design approval, which is suspended, shall forthwith produce the authorisation or approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a ZA-TSO authorisation or a ZA-TSO design approval, which is cancelled, shall within 30 days from the date on which the authorisation or approval is cancelled, surrender such authorisation or approval to the Director.

PART 24: AIRWORTHINESS STANDARDS: NON-TYPE CERTIFICATED AIRCRAFT

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SUBPART 1: GENERAL

Applicability

24.01.1 (1) This Part applies to –

- (a) Amateur-built aircraft;
- (b) Production-built aircraft;
- (c) Veteran aircraft;
- (d) Ex-military aircraft;
- (e) Any other aircraft not qualifying, or no longer qualifying for the issue of a certificate of airworthiness in terms of Part 21 of these Regulations.
- (2) The aircraft referred to in sub-regulation (1) are classified in the following sub-groups
 - (a) Aeroplanes, including microlight aeroplanes
 - (b) Helicopters
 - (c) Gyroplanes and gyrogliders
 - (d) Gliders, including self-launching gliders and touring gliders
 - (e) Manned captive and manned free balloons
 - (f) Airships
 - (g) Unmanned aerial vehicles
 - (h) Hang-gliders, including powered hang-gliders
 - (i) Paragliders, including powered paragliders and paratrikes
 - (i) Parachutes
 - (k) Model aircraft
 - (I) Rockets

- (3) This Part does not apply to any aircraft that, for the purpose of flight
 - (a) is to be attached to and towed by a vehicle or vessel travelling on the surface;
 - (b) other than a manned captive balloon, is to be moored to the surface or any construction on the surface; and
 - (c) is to be flown line-controlled by a person on the surface:

Provided that such aircraft shall not be operated in contravention of these regulations, or cause an obstruction to aviation.

(4) The airworthiness design standards for each sub-group of aircraft referred to in sub-regulation (2) are those referred to in regulation 24.01.2(5)(a).

Airworthiness

- **24.01.2** (1) Before a non-type certificated aircraft, other than an aircraft classified in paragraphs (k) and (l) in regulation 24.01.1(2), is considered to be airworthy it shall
 - (a) have been issued with an authority to fly or a proving flight authority or special flight permit, as the case may be in terms of this Part;
 - (b) have been maintained in accordance with the provisions of Part 44;
 - (c) have no known condition which could make the aircraft unsafe for flight; and
 - (d) have on-board, and in working order, the relevant communication and navigation equipment prescribed in Part 94 and Part 96 as applicable for the operation of the particular type of aircraft.
- (2) In the case of
 - (a) amateur built aircraft, only those aircraft, of which the build standard has been submitted to the Director, may be built or imported and flown within the Republic: Provided that
 - (i) Before any person commences with the construction of an aircraft, which is intended to be put on the South African Civil Aircraft Register, such person shall apply for a build number.
 - (ii) The application shall be made to the Director or the organisation designated for the purpose in terms of the Act, as the case may be, in the format prescribed in Document SA-CATS 24 and shall be accompanied by a copy of the design criteria of the aircraft, as prescribed in Document SA-CATS 24.
 - (iii) The Director or the organisation designated for the purpose in terms of the Act, as the case may be, shall on receipt of the prescribed documentation issue the build number to the applicant.
 - (iv) The Director or the organisation designated for the purpose in terms of the Act, as the case may be, must retain a register of build numbers issued and make relevant information available to any authorised officer, inspector or

- authorised person who needs such information for the purpose of oversight and inspection.
- (v) The applicant, on being issued with the build number, shall enter a record of the build number in the aircrafts logbook or any other document associated with the construction of the aircraft.
- (b) production built aircraft, only those aircraft, of which the type design, the local or foreign manufacturing organisation and facility, the local assembling organisation and facility or agent/distributor, and the build standard has been approved by the Director may be built or imported and flown within the Republic.
- (3) For the purposes of sub-regulation (2), the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may consider a foreign manufacturing organisation as being approved if that facility was approved by an appropriate authority.
- (4) The design criteria and the build standard for an amateur- or production-built aircraft must
 - (a) comply with the appropriate design criteria as prescribed in Document SA-CATS 24;
 - (b) comply with any special conditions prescribed in regulation 24.02.4 or by the Director orthe organisation designated for the purpose in terms of Part 149, as the case may be; and
 - (c) incorporate no feature or characteristic that makes the aircraft type unsafe for its intended use.

(5) In the case of –

- (i) amateur built aircraft, static tests, as required, are to be carried out on the aircraft prior to its first flight or after a structural modification, referred to in Regulation 44.03.14, according to Document SA-CATS 24.
- (ii) production built aircraft, in the absence of static test documentation from an appropriate authority acceptable to the Director, static tests, as required, are to be carried out on the aircraft prior to its first flight or after a structural modification, referred to in regulation 44.03.14, according to Document SA-CATS 24.
- (6) The airworthiness of the aircraft, classified in sub-paragraphs (h) to (l) in regulation 24.01.1(2), shall be the sole responsibility of the owner or operator in accordance with generally accepted practices for such aircraft or as laid down by the organisation, approved for the purpose in terms of Part 149.

Registration

24.01.3 No non-type certificated aircraft classified in the sub-groups (a) to (g) of sub-regulation 24.01.1(2) shall be flown unless it has been registered and marked in accordance with the provisions of Part 47.

Aircraft documentation

- **24.01.4** (1) The owner of a non-type certificated aircraft specified under regulation 24.01.1(1) and classified in the sub-groups (a) to (g) of sub-regulation 24.01.1(2) shall submit to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, for approval, the documentation prescribed in SA-CATS 24.
- (2) In the case of a production-built aircraft, a copy of the approved manuals, together with the aircraft logbook/s, shall accompany the aircraft, the kit, or the approved build standards on its delivery to a customer.
- (3) In the case where proving flights for the purpose of consideration and issue of an authority to fly are carried out, the owner of the non-type certificated aircraft shall retain all documents and records, generated in the process, for the duration of the life of the aircraft.

Instruments, equipment and placards

- **24.01.5** (1) Any flight instrument, required to be installed in terms of these Regulations, shall be calibrated before first flight, and be checked for calibration annually thereafter.
- (2) The minimum instrumentation and equipment and the placards to be installed in non-type certificated aircraft shall be as prescribed in Document SA-CATS 24.

Issuing of airworthiness directives

- **24.01.6** (1) The Director may issue appropriate airworthiness directives in respect of design changes that are necessary to correct the unsafe condition of a non-type certificated aircraft.
- (2) If the Director issues an airworthiness directive in terms of sub-regulation (1), the holder of any certificate issued in terms of this Part for the aircraft or its component, shall
 - (a) upon the request of the Director, submit appropriate design changes to the Director for approval; and
 - (b) upon approval of the design changes, if applicable, make the descriptive data covering the changes available to all operators of the product.

Safety inspections and audits

- **24.01.7** (1) An applicant for the issuing of any certificate, approval or authorisation in terms of this Part, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and flight and ground tests which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of any certificate, approval or authorisation issued under this Part, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and

audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

(3) Any inspection carried out on a non-type certificated aircraft in terms of sub-regulation (1) is of a conditional nature, in that the inspector an appropriately rated approved AMO, AME or approved person, rated in accordance with subpart 4 of Part 66 shall not be required to guarantee the airworthiness of the aircraft. The owner or operator of the aircraft shall at all times be responsible for the airworthiness status of the aircraft and, if called upon, shall prove to an inspector that the aircraft is in an airworthy condition.

Register of certificates

- **24.01.8** (1) The Director or, if applicable, the organisation designated for the purpose in terms of Part 149 as the case may be, shall maintain a register of all certificates, approvals or authorisations issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the certificate, approval or authorisation;
 - (b) the postal address of the holder of the certificate, approval or authorisation; and
 - (c) the date on which the certificate approval or authorisation was issued.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within thirty days from the date on which the certificate, approval or authorisation is issued.
- (4) The register, and a true, certified copy of the issued certificate, approval or authorisation shall be kept in a safe place at the office of the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 as the case may be.
- (5) A copy of the register shall be furnished by the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 as the case may be, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Transitional provision

24.01.9 For the purposes of this Part, and until such time that an organisation has been approved in terms of Part 149, any person building or maintaining a non-type certificated aircraft for aviation recreational purposes shall comply with the airworthiness standards and procedures prescribed for its members by the national body representative of the particular aviation sport, provided that these standards and procedures include those prescribed in, and are not in conflict with, the provisions of this Part.

SUBPART 2: AUTHORITY TO FLY, PROVING FLIGHT AUTHORITY AND SPECIAL FLIGHT PERMIT

Application

- **24.02.1** (1) (a) An owner of a non-type certificated aircraft classified in the paragraphs (a) to (g) of sub-regulation 24.01.1(2), or his, her or its authorised representative, may apply for the issuing of an authority to fly for the aircraft, or for an amendment thereof.
- (b) In respect of an aircraft, classified in paragraphs (h) to (l) of sub-regulations 24.01.1(2), no authority to fly or proving flight authority is required.
- (2) An application for the issuing of an authority to fly, or an amendment thereof, shall be
 - (a) made to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 of these Regulations, as the case may be, on the prescribed form;
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) proof of compliance with the provisions of regulation 24.01.2(5);
 - (iii) the aircraft logbook/s or similar document, or certified true copies of all entries;
 - (iv) certified true copies of all documents and records in the construction or testing file;
 - (v) a certified true copy of the flight manual, if applicable; and
 - (vi) a certified true copy of the approved maintenance schedule, referred to in Part 44.

Requirements

- **24.02.2** (1) An applicant for the issuing of an authority to fly for a non-type certificated aircraft, or an amendment thereof, shall provide the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, with proof that, in the case of
 - (a) a non-type certificated aircraft, built in the Republic,
 - (i) the provisions of Document SA-CATS 24 in respect of proving flights and of performance, handling and strength tests have been complied with; and
 - (ii) the aircraft, other than an amateur-built aircraft, was manufactured or assembled by an organisation designated by the Director in terms of regulation 24.03.1;
 - (b) an imported non-type certificated aircraft, where the owner requests the aircraft to be registered in the South African Civil Aircraft Register, the aircraft
 - (i) has been de-registered in the country of export or was never registered;
 - (ii) had been issued with a certificate of airworthiness, an authority to fly, or similar certificate by the appropriate authority of the country of de-registration; and

- (iii) complies with all the applicable provisions of this Part; or
- (iv) where the aircraft is a production-built aircraft which has not been previously issued with an authority to fly or similar certificate by an appropriate authority, it was manufactured or assembled by an organisation designated by the Director in terms of regulation 24.03.1.
- (2) Prospective owners of an aircraft referred to in paragraph (b) of sub-regulation (1) shall first consult the Director and obtain approval before importing such an aircraft.
- (3) Examples of documentation, required to show compliance with the provisions of sub-regulation (1), are outlined in Document SA-CATS 24.
- (4) Except for the production-built aircraft referred to in sub-regulation (1)(b)(iv), only aircraft which previously have been registered and issued with a certificate of airworthiness, an authority to fly, or similar document by the appropriate authority of the country of deregistration may be imported into the Republic.
- (5) The applicant shall, in addition to the provisions of sub-regulation (1), submit proof that
 - (a) any modification to the aircraft conforms to the design changes approved for the type;
 - (b) the aircraft complies with all appropriate airworthiness directives issued in terms of regulation 24.01.6;
 - (c) the aircraft is issued with the appropriate flight manual, and any logbooks, repair and alteration forms and documents which the Director may require:
 - (d) an annual inspection has been carried out in accordance with the requirements of regulation 44.01.6; and
 - (e) the aircraft is in a condition for safe operation.
- (6)(a) Where the application is in respect of a previously type-certificated aircraft, other than a veteran aircraft, the applicant shall provide proof that the original identification plate has been removed and handed to the appropriate authority and the aircraft re-registered as a different make and type of aircraft.
- (b) The Director shall inform the original manufacturer of the fact that the aircraft no longer meets its type certificate.
- (7) In addition to the provisions of sub-regulation (1), (5) and (6), the applicant shall provide
 - (a) any other airworthiness data which the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, may require; and
 - (b) any document relating to the operation of the aircraft which the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, may require.
- (8) An application referred to in sub-regulation (1) shall be accompanied by the appropriate fee as prescribed in Part 187.

Issuing

- **24.02.3** (1) An application in terms of regulation 24.02.1 shall be granted and an authority to fly issued if the applicant complies with the provisions of regulation 24.02.2.
- (2) An authority to fly is issued subject to such conditions and limitations which may be determined by the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 of these Regulations, as the case may be.
- (3) Whether the authority to fly will include permission to operate the aircraft at night, under IMC, or in commercial air transport operations or to conduct semi-aerobatic or aerobatic flights, depends on the results of the proving flights and the installed equipment.
- (4) In the case of a locally built amateur-built aircraft, or in the case of any aircraft that previously has been issued with a certificate of airworthiness in terms of Part 21 or a similar document issued by another State in accordance with Annex 8 to the Convention, or of which the certificate of airworthiness or authority to fly has become invalid as a result of a proposed major modification, the authority to fly may normally be granted, or re-issued as the case may be, in two stages, namely, a proving flight authority and, thereafter, where applicable, the authority to fly.
- (5) (a) Before a proving flight authority or an authority to fly is issued, the aircraft may be required to be inspected by an authorised officer, inspector or authorised person, and the owner shall be advised accordingly.
- (b) The owner shall make the aircraft available for such inspection, where and when required.

Proving flight authority

- (6) A proving flight authority shall show the base from which the proving flights are to be carried out.
- (7) A proving flight authority may be extended for further periods at the discretion of the Director, or if applicable, the organisation designated for the purpose in terms of Part 149 of these Regulations, as the case may be, on the submission of an inspection report equivalent to an annual inspection.
- (8) The constructor, as required, may effect modifications and repairs during the periods of validity of the proving flight authority. However, should a major modification or repair be required, the Director or the organisation designated in terms of Part 149 of these Regulations, may require that the proving flights be commenced anew.
- (9) Proving flights shall be carried out as prescribed in document SA-CATS 24.

- (10) Flights conducted in terms of a proving flight authority
 - (a) are limited to an area not exceeding 100 km radius from the specified base from which such flights are to be undertaken, unless stated otherwise on the proving flight authority;
 - (b) may only be conducted under VMC by day;
 - (c) are forbidden over open-air assemblies of persons; and
 - (d) are forbidden over built-up areas, except where necessary for take-off and landing.
- (11) Only essential crew members, including those persons assigned to carry out in-flight inspections, may be carried on board the aircraft during flights conducted in terms of a proving flight authority.
- (12) Where a proving flight authority is issued in respect of an aircraft of a new design, or of which the originally-approved design has undergone major modification, the first flight or flights shall be conducted by a pilot with the appropriate test flight rating.
- (13) With the approval of the Director, the flight or flights referred to in sub-regulation (12), the owner of the aircraft, if suitably qualified, may carry out additional proving flights. For the purpose of this sub-regulation, where the 'owner' consists of more than one natural person, one of these persons shall be designated by the test pilot to carry out the proving flights.
- (14) The owner, referred to in sub-regulation (13), shall be a licensed pilot, holding the appropriate category and class rating, and having been converted on type by an appropriately rated flight instructor.
- (15) Apart from any conversion training, which may be required in terms of sub-regulation (14), no flight training may be conducted on an aircraft, operated in terms of a proving flight authority.
- (16) Where the limitations for flight still have to be established, such proving flight or flights shall be carried out by a pilot with the appropriate test flight rating.
- (17) The final proving flight for the issue of an authority to fly shall be carried out by a pilot with the appropriate test flight rating who, if applicable, shall be the pilot who carried out the proving flights, referred to in sub-regulation (16).

Special flight permit

- **24.02.4** (1) The Director or the organisation designated for the purpose in terms of Part 149 of these Regulations, as the case may be, may issue a special flight permit.
- (2) A special flight permit for an aircraft may be issued for the purposes of -
 - (a) ferrying an aircraft, where the authority to fly has become invalid, to a base where maintenance can be carried out;
 - (b) delivering or exporting the aircraft;
 - (c) evacuating the aircraft from areas of impending danger;

- (d) carrying out a flight or a series of flights while the aircraft does not conform to the appropriate airworthiness design standards referred to in regulation 24.01.2; or
- (e) operation of an aircraft at a mass in excess of its maximum certificated take-off mass for flights beyond the normal range over water or over land areas where adequate landing facilities or appropriate fuel is not available. The excess mass that may be authorised under this sub-regulation is limited to the additional fuel, fuel-carrying facilities, and navigation and emergency equipment necessary for the flight.
- (3) An application for the issuing of a special flight permit for an aircraft or an amendment thereto, shall be made on the prescribed form.
- (4) A special flight permit issued in terms of this Part shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State permission of the responsible aeronautical authority is required.

Form

24.02.5 An authority to fly and a proving flight authority shall be issued on the appropriate prescribed form.

Period of validity

- 24.02.6 (1) An authority to fly and a proving flight authority shall be valid until
 - (a) the expiry date;
 - (b) it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person;
 - (c) cancelled by the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be;
 - (d) a major modification is effected to the aircraft; or
 - (e) the aircraft is involved in an incident or accident that results in major damage to its primary structure.
- (2) Subject to the provisions of sub-regulation (1), an authority to fly or proving flight authority shall remain valid for as long as
 - (a) the aircraft remains registered on the South African Civil Aircraft Register; and
 - (b) the aircraft is maintained in accordance with the regulations.
- (3) The holder of an authority to fly or proving flight authority which expired shall forthwith surrender the authority to fly or proving flight authority to the Director or, if applicable, the organisation designated for the purpose in terms of these Regulations, as the case may be.
- (4) The holder of an authority to fly or proving flight authority which is suspended shall forthwith produce the authority to fly or proving flight authority upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.

- (5) The holder of an authority to fly or proving flight authority which is cancelled shall, within 30 days from the date on which the authority to fly or proving flight authority is cancelled, surrender such certificate to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 of these Regulations, as the case may be.
- (6) An authority to fly or a proving flight authority, which has been suspended, shall be reinstated when the cause for the suspension has been corrected to the satisfaction of the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 of these Regulations, as the case may be.

International operations

- **24.02.7** (1) An authority to fly is only valid for flight in South African airspace.
- (2) Notwithstanding the provision of sub-regulation (1), a non-type certificated aircraft, issued with a South African Authority to fly, may be flown outside the Republic's borders if the appropriate authority with jurisdiction over the relevant airspace has given prior permission for the aircraft to be flown in such airspace, in the full knowledge that the authority to fly is not equivalent to a certificate of airworthiness issued in terms of ICAO Annex 8 to the Convention.

Currency fee

- **24.02.8** (1) (a) A currency fee, as prescribed in Part 187, shall be payable by the holder of an authority to fly, on the anniversary date of such authority to fly.
- (b) Should the authority to fly not be valid at the time for any of the reasons stated in regulation 24.02.6, the currency fee will be waived until such time that the authority to fly is reinstated and the relevant fee for reinstatement becomes payable.
- (2) The reinstatement date shall become the new anniversary date.

Transferability

- **24.02.9** (1) Although a proving flight authority or an authority to fly may be transferred in the name of a new owner, the aircraft may be re-registered in the new owner's name only
 - (a) if all documents related to the airworthiness of the aircraft, including reports related to proving flights and the aircraft's logbooks, have been handed over to the new owner; or
 - (b) if the provisions of paragraph (a) have not or cannot been met, an inspection equivalent to an annual inspection has been carried out by a suitably qualified person other than the original owner, and the aircraft has been certified to be airworthy.
- (2) After the transfer of a proving flight authority, the provisions of regulation 24.02.3 (6) to (17) shall apply with the necessary changes.
- (3) The Director, or if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, shall determine the conditions for the continuation of the proving flights by or on behalf of the new owner, which conditions may include the instruction that the proving flights shall be commenced anew.

(4) The provisions of Part 47 of these Regulations shall apply with the necessary changes in respect of an application for the re-registration of an aircraft following a change of ownership.

Aircraft type approval

- **24.02.10** (1) An application for an aircraft type approval for an amateur-built aircraft to qualify as a production-built aircraft, shall be made in the prescribed form, and accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) proof of compliance with the provisions of regulation 24.01.2, and in particular the technical standard 24.01.2.(2.2);
 - (c) a copy of the authority to fly issued for the prototype aircraft; and
 - (d) proof that the applicant meets the requirements of regulation 24.03.1.
- (2) The Director shall issue a production-built aircraft type certificate in the prescribed form, if he or she is satisfied that
 - (a) the applicant has been or may be approved as a manufacturing organisation in terms of regulation 24.03.1; and
 - (b) the aircraft will be manufactured according to the approved build standard.

SUBPART 3: APPROVAL OF ORGANISATION

Application

- **24.03.1** (1) An application for the approval of a manufacturing or assembling organisation shall meet those provisions of Part 148, which the Director considers to be applicable.
- (2) An application for the approval of a maintenance organisation or repair facility shall meet those provisions of Part 145, which the Director considers to be applicable.

Cost recovery

24.03.2 The cost incurred by the Authority for approving a local or foreign organisation; i.e. travel, accommodation and subsistence, shall be at the expense of the applicant, manufacturer or agent, as the case may be.

Approved organisations

24.03.3 A list of approved organisations, if any, shall be provided in Document SA-CATS 24.

PART 34: ENGINE EMISSION CERTIFICATION

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SUBPART 1: GENERAL

Applicability

34.01.1 This Part applies –

- (a) in respect of fuel venting, to turbine engine powered aircraft manufactured after 18 February 1982; and
- (b) in respect of engine emissions, to aircraft with
 - (i) turbo-jet and turbofan engines intended for propulsion only at subsonic speeds; and
 - (ii) turbo-jet and turbofan engines intended for propulsion at supersonic speeds, of which the date of manufacture is on or after 18 February 1982.

Safety inspections and audits

- **34.01.2** (1) An applicant for the issuing of a fuel venting certificate or an engine emission certificate, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and flight and ground tests which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of a fuel venting certificate or an engine emission certificate issued under this part, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this part.

Register of certificates

- **34.01.3** (1) The Director shall maintain a current register of fuel venting certificates and engine emission certificates issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the fuel venting certificate or engine emission certificate;
 - (b) the postal address of the holder of the fuel venting certificate or engine emission certificate:
 - (c) the date on which the fuel venting certificate or engine emission certificate was issued;
 - (d) the number of the fuel venting certificate or engine emission certificate issued;
 - (e) the date on which the fuel venting certificate or engine emission certificate is suspended, if applicable; and
 - (f) in the case of a transfer of an aircraft -
 - (i) the date on which the fuel venting certificate or engine emission certificate was transferred;
 - (ii) the full name and the trade name of the transferee, if any; and
 - (iii) the postal address of the transferee.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the fuel venting certificate or engine emission certificate is issued, transferred or suspended, as the case may be.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) Information from the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requires such information.

SUBPART 2: FUEL VENTING CERTIFICATES

Fuel venting standards

34.02.1 Subject to the provisions of regulation 34.01.1, any person who applies in terms of Part 21 for –

- (a) the issuing of a type certificate;
- (b) the issuing of a type acceptance certificate;
- (c) any change to a type certificate;
- (d) any change to a type acceptance certificate; or
- (e) a standard category certificate of airworthiness,

shall comply with fuel venting standards as prescribed in Document SA-CATS 34.

Recognition of foreign fuel venting certificate

34.02.2 The Director may recognise a fuel venting certificate or an equivalent document issued by an appropriate authority, if the standards under which the fuel venting certificate or equivalent document was issued, are not less stringent than the standards as prescribed in Document SA-CATS 34.

Application for fuel venting certificate

34.02.3 An application for the issuing of a fuel venting certificate shall be –

- (a) made in the prescribed form and manner; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof that the aircraft concerned complies with the fuel venting standards referred to in regulation 34.02.1.

Issuing of fuel venting certificate

34.02.4 An application in terms of regulation 34.02.3 shall be granted and a fuel venting certificate issued in the appropriate form, if the applicant complies with the fuel venting standards referred to in regulation 34.02.1.

Period of validity

- **34.02.5** (1) A fuel venting certificate shall be valid
 - (a) for the period for which the type certificate, type acceptance certificate or standard certificate of airworthiness held by the holder of the fuel venting certificate is valid, and such holder complies with the appropriate fuel venting standards referred to in regulation 34.02.1;
 - (b) until the fuel venting certificate is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) The holder of a fuel venting certificate which is suspended, shall forthwith produce the fuel venting certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of a fuel venting certificate which is cancelled, shall, within 30 days from the date on which the fuel venting certificate is cancelled, surrender such fuel venting certificate to the Director.

Transfer of fuel venting certificate

34.02.6 A fuel venting certificate shall be transferred with the aircraft.

SUBPART 3: ENGINE EMISSION CERTIFICATE

Engine emission standards

34.03.1 Subject to the provisions of regulation 34.01.1, any person who applies in terms of Part 21 for –

- (a) the issuing of a type certificate;
- (b) the issuing of a type acceptance certificate;
- (c) any change to a type certificate;
- (d) any change to a type acceptance certificate; or
- (e) a standard category certificate of airworthiness,

shall comply with the appropriate engine emission standards as prescribed in Document SA-CATS 34.

Recognition of foreign engine emission certificate

34.03.2 The Director may recognise and engine emission certificate or an equivalent document issued by an appropriate authority, if the standards under which the engine emission certificate or equivalent document was issued, are not less stringent than the standards as prescribed in Document SA-CATS 24.

Application for engine emission certificate

34.03.3 An application for the issuing of an engine emission certificate shall be –

- (a) made in the prescribed form and manner; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof that the engine concerned complies with the engine emission standards referred to in regulation 34.03.1.

Issuing of engine emission certificate

34.03.4 An application in terms of regulation 34.03.3 shall be granted and an engine emission certificate issued in the appropriate form, if the applicant complies with the engine emission standards referred to in regulation 34.03.1.

Period of validity

34.03.5 (1) An engine emission certificate shall be valid –

- (a) for the period for which the type certificate, type acceptance certificate or standard certificate of airworthiness held by the holder of the engine emission certificate is valid, and such holder complies with the appropriate engine emission standards referred to in regulation 34.03.1;
- (b) until the engine emission certificate is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (2) The holder of an engine emission certificate which is suspended, shall forthwith produce the engine emission certificate upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of an engine emission certificate which is cancelled, shall, within 30 days from the date on which the engine emission certificate is cancelled, surrender such engine emission certificate to the Director.

Transfer of engine emission certificate

34.03.6 An engine emission certificate shall be transferred with the aircraft.

PART 36: NOISE CERTIFICATION

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Applicability

36.00.1 This Part applies to –

- (a) subsonic jet aeroplanes;
- (b) supersonic aeroplanes;
- (c) propeller driven aeroplanes with a MCM exceeding 5 700 kilograms;
- (d) propeller driven aeroplanes with a MCM of 5 700 kilograms or less;
- (e) propeller-driven STOL aeroplanes; and
- (f) helicopters.

Noise standards

36.00.2 Subject to the provisions of regulation 36.00.1, any persons who applies in terms of Part 21 for –

- (a) the issuing of a type certificate;
- (b) the issuing of a type acceptance certificate;
- (c) any change to a type certificate;
- (d) any change to a type acceptance certificate; or
- (e) a standard category certificate of airworthiness,

shall comply with the appropriate noise standards as prescribed in Document SA-CATS 36.

Recognition of foreign noise certificate

36.00.3 The Director may recognise a noise certificate or an equivalent document issued by an appropriate authority, if the standards under which the noise certificate or equivalent document was issued, are not less stringent than the standards as prescribed in Document SA-CATS 36.

Safety inspections and audits

- **36.00.4** (1) An applicant for the issuing of a noise certificate, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and flight and ground tests which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of a noise certificate issued under this part, shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this part.

Application for noise certificate

- **36.00.5** An application for the issuing of a noise certificate shall be
 - (a) made in the prescribed form and manner; and
 - (b) accompanied by
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof that the aircraft concerned complies with the noise standards referred to in regulation 36.00.2.

Issuing of noise certificate

36.00.6 An application in terms of regulation 36.00.5 shall be granted and a noise certificate issued in the appropriate form, if the applicant complies with the noise standards referred to in regulation 36.00.2.

Period of validity

- **36.00.7** (1) A noise certificate shall be valid
 - (a) for the period for which the type certificate, type acceptance certificate or standard certificate of airworthiness held by the holder of the noise certificate is valid, and such holder complies with the appropriate noise standards referred to in regulation 36.00.2;

(b) until the noise certificate is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.

(2) The holder of a noise certificate which is suspended, shall forthwith produce the noise certificate upon suspension thereof, to the authorised officer, inspector or authorised person

concerned for the appropriate endorsement.

(3) The holder of a noise certificate which is cancelled, shall, within 30 days from the date on which the noise certificate is cancelled, surrender such noise certificate to the Director.

Transfer of noise certificate

36.00.8 A noise certificate shall be transferred with the aircraft.

Register of certificates

36.00.9 (1) The Director shall maintain a current register of noise certificates issued in terms

of this Part.

(2) The register shall contain the following particulars:

(a) The full name of the holder of the noise certificate;

(b) the postal address of the holder of the noise certificate;

(c) the date on which the noise certificate was issued:

(d) the number of the noise certificate issued:

(e) the date on which the noise certificate is suspended, if applicable; and

(f) in the case of a transfer of an aircraft –

(i) the date on which the noise certificate was transferred;

(ii) the full name and the trade name of the transferee, if any; and

(iii) the postal address of the transferee.

(3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the noise certificate is issued, transferred or suspended, as the

case may be.

(4) The register shall be kept in a safe place at the office of the Director.

(5) Information from the register shall be furnished by the Director, on payment of the

appropriate fee as prescribed in Part 187, to any person who requires such information.

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SUBPART 1: GENERAL

Applicability

- **43.01.1** (1) This Part applies to the maintenance, and the release to service after maintenance, of
 - (a) type certificated aircraft registered in the Republic; and
 - (b) aircraft components to be fitted to such aircraft.
- (2) This Part does not apply to any aircraft specified in regulation 24.01.1.

Falsification, reproduction or alteration of maintenance documents

- **43.01.2** No person shall make or cause to be made
 - (a) any fraudulent or false entry in any record, which is required to be made, kept, or used to show compliance with any requirement prescribed in this Part; or
 - (b) any reproduction or alteration for fraudulent purposes, of any record or report made in terms of the provisions of this Part.

Logbooks

- **43.01.3** (1) Subject to the provisions of sub-regulation (2), the following logbooks shall be kept in respect of South African registered aircraft and other specified equipment for the purpose of recording therein the maintenance history of the equipment to which each relates:
 - (a) an approved aircraft logbook for each aircraft;
 - (b) an approved engine logbook for each aircraft engine; and
 - (c) an approved propeller logbook for each propeller.
- (2) (a) Logbooks should preferably be kept at the aircraft's base of operation.
- (b) Details in respect of maintenance carried out while away from base shall be transferred to the appropriate logbook(s) within 48 hours after the return of the aircraft to its base of operation or entered within 48 hours of completion of any maintenance performed on the aircraft or other equipment at its base of operation.
- (3) All logbooks shall be made available to an authorised officer, an inspector or an authorised person at all times for inspection.

- (4) For an aircraft with a maximum approved passenger seat configuration in excess of nine seats, an aeroplane with a MCM in excess of 5 700 kg, or a helicopter with a MCM in excess of 3 175 kg, the logbook may refer to a separate system approved in its approved maintenance schedule for component and major repair tracking. Any entry in such system shall meet the requirements as prescribed for logbooks.
- (5) The format of the logbooks shall be as prescribed in Document SA-CATS 43. .

Preservation of logbooks

- **43.01.4** (1) The logbooks shall be preserved for a period of not less than six months from the date of destruction of the airframe, engine or propeller for which they were kept, unless the Director has prescribed a longer period in respect of the logbooks of an aircraft, its engine(s) or propeller(s) involved on an accident or incident.
- (2)(a) Logbooks shall preferably not be carried in the aircraft to which they relate.
- (b) In the case where the provisions of sub-regulation (3) are applicable, or when logbooks are needed for maintenance purposes and no other means of forwarding such logbooks are reasonably available, the logbooks are to be carried in the relevant aircraft.
- (3) When an aircraft is exported and the logbooks are transported with the aircraft, a copy of the last major overhaul and repairs performed as well as copies of the defects rectification for the last six (6) months prior to export shall be retained by the exporter or the responsible aviation maintenance organisation, as the case may be.

Entries in logbooks

- **43.01.5** (1)(a) Entries in logbooks shall be made and signed by the holder of an appropriate licence, a person holding a valid authorisation issued in terms of Part 145, or by a person approved for the purpose by the Director.
- (b) Matters that could not have come to the notice of such licence holder or approved person shall be entered and signed by the pilot-in- command.
- (2) Any record kept for the purpose of compiling a logbook entry or where reference is made to a record system other than the logbook shall be produced when called for in the event of any inspection or investigation by an authorised officer, inspector or authorised person.
- (3) Entries in logbooks shall contain all the information and particulars provided for in the logbook.
- (4) (a) Whenever corrections are made to entries in a logbook, the correction shall be made in such a way that the original entry still remains legible.
- (b) The use of tippex or similar correction methods is prohibited.

Entries of special significance

43.01.6 When repairs to an aircraft, aircraft engine or component or fixed or removable equipment were required in consequence either of damage caused by a forced or hard landing or of defects that occasioned a forced landing, the entry or entries made in the relevant logbook or books in respect of such repairs shall state that they were so required and shall identify the forced or hard landing in question.

Maintenance of logbooks

43.01.7 The logbooks shall be kept up to date and maintained in a legible and permanent manner and in accordance with the "Instructions for use" in the logbook.

Loss of logbooks

- **43.01.8** (1) When the registered owner of an aircraft reports the loss of a logbook currently in use, a request to open a substitute logbook shall be made in writing to the Director accompanied by affidavit and appropriate data for the purpose of reconstructing the logbook.
- (2) When the Director approves the opening of a substitute logbook, the relevant authorisation shall be made a permanent part of that logbook.
- (3) The procedure to be followed for the opening of a substitute logbook is prescribed in SA-CATS 43.
- (4) When a logbook has been lost, the relevant certificate of airworthiness or authority to fly shall be considered invalid until such time that all the requirements for the opening of a substitute logbook have been met.

SUBPART 2: MAINTENANCE

Aircraft maintenance schedules

- **43.02.1** (1) Every type certificated aircraft on the South African Civil Aircraft Register shall be maintained according to an approved aircraft maintenance schedule as prescribed in regulation 43.02.8.
- (2) The owner of an aircraft shall draw up, or have drawn up a maintenance schedule for his or her aircraft in accordance with the provisions of technical standard 43.02.8 in Document SA-CATS 43.
- (3) The owner or the responsible AMO shall submit the proposed maintenance schedule to the Director for approval.
- (4) Provided the proposed maintenance schedule meets all the requirements of technical standard 43.02.8, the Director shall approve the proposed aircraft maintenance schedule either as submitted or as amended by him or her in the interest of aviation safety.

(5) The owner may request the Director for a permanent or temporary amendment to the approved aircraft maintenance schedule.

Persons to carry out maintenance

- **43.02.2** (1) Subject to the provisions of sub-regulations (2) and (3), no person shall carry out maintenance on a type certificated aircraft or aircraft component unless such person
 - (a) is the holder of an AME licence with an appropriate rating issued in terms of Part 66;
 - (b) carries out maintenance under the direct supervision of the holder of an AME licence with an appropriate rating issued in terms of Part 66; or
 - (c) is authorised by the holder of an AMO approval with an appropriate rating issued in terms of Part 145, to carry out maintenance within the scope of such approval.
- (2) The holder of a pilot licence with an appropriate type rating issued in terms of Part 61 or Part 62 may carry out the maintenance as prescribed in Document SA-CATS 43 if
 - (a) such holder is the owner or operator of the aircraft; and
 - (b) the aircraft is used for non-commercial operations.
- (3) The routine maintenance, scheduled inspections, structural integrity inspections, overhaul, modification, major repairs and structural repairs on aeroplanes with a MCM in excess of 5 700 kg or on helicopters with a MCM in excess of 3 175 kg shall be undertaken and certified by an appropriately rated approved AMO only.

Carrying out of maintenance

- **43.02.3** Any person who carries out maintenance on an aircraft or aircraft component shall
 - (a) have available adequate accommodation and facilities for the necessary disassembly, proper inspection and re-assembly of the aircraft or aircraft component;
 - (b) use methods, techniques and practices which are
 - (i) prescribed in the current manufacturer's maintenance manual or in any instructions for safe operation and continued airworthiness;
 - (ii) in accordance with the approved maintenance schedule for the aircraft;
 - (iii) in accordance with Document SA-CATS 43; or
 - (iv) approved by the Director;
 - use the tools, equipment and test apparatus necessary to ensure that the maintenance is carried out in accordance with the appropriate manufacturer's requirements or standard practices approved by the Director;
 - (d) on completion of the maintenance, ensure that the condition of the aircraft or aircraft component is satisfactory for release to service and is at least equal to its original or properly modified condition with regard to –
 - (i) aerodynamic function;
 - (ii) structural strength;
 - (iii) resistance to vibration and deterioration; and
 - (iv) other qualities affecting airworthiness;

- (e) use any special or test equipment recommended by the manufacturer, or equivalent equipment approved by the Director; and
- (f) if maintenance is carried out on an aircraft operated under an operating certificate, carry out such maintenance in accordance with the operator's approved maintenance control manual (MCM). The format and requirements for an MCM are prescribed in Document SA-CATS 43.

Rectification of unsatisfactory items

- **43.02.4** (1) When during any maintenance or at any other time any part, product, component, equipment or item is found to be unserviceable or is unlikely to remain serviceable under normal operating conditions during the period preceding the next inspection, such rectification action as considered necessary shall be taken to ensure the continued serviceability of the part, component or item prior to releasing the aircraft to service.
- (2) Deferred defects shall be transferred from the flight folio onto a work sheet. Any maintenance carried out to restore the serviceability of any part, component, equipment or item shall be clearly recorded in the relevant logbook or other approved recording system, and be certified by an appropriately rated licence or approval holder prior to releasing the aircraft to service.
- (3) The person certifying the entry referred to in sub-regulation (2) shall furthermore certify in the relevant flight folio that the deferred defect has been rectified, and he or she shall date and sign the entry accordingly.

Overhaul, repair and substitution of major components

- **43.02.5** (1) Unless the Director has otherwise approved, an aircraft and its components and installed equipment shall be overhauled or substituted at such times as recommended or specified by its manufacturer.
- (2) Overhaul of a Class I or Class II product and repairs to the primary structure of an aircraft, its engine(s) or propeller(s) shall be undertaken by an appropriately rated approved AMO only.
- (3) The procedure for reinstating the validity of a certificate of airworthiness deemed suspended when an aircraft is involved in an accident or incident that renders one or more Class I products defective is prescribed in Document SA-CATS 43.
- (4) The requirements for the overhaul of components and equipment installed on an aircraft and of engines and propellers are those prescribed in Document SA-CATS 43.
- (5) Where the Director has approved a time between overhaul (TBO) that differs from that recommended or specified by the manufacturer, such TBO shall be specified in the aircraft's approved maintenance schedule. Furthermore, where a manufacturer has not recommended or specified the overhaul of an item at certain times but where the Director considers its overhaul at certain intervals necessary in the interest of safety, he or she may prescribe a time between overhaul for such item in the aircraft's approved maintenance schedule.

(6) The requirements for the substitution of products, components and parts with new or overhauled items are those prescribed in Documents SA-CATS 43.

Maintenance for IFR operations

43.02.6 Any person who carries out an inspection or maintenance on equipment required for communication, navigation and surveillance in an aircraft to be used under IFR shall carry out the inspection as prescribed in Document SA-CATS 43.

Mass and balance

- **43.02.7** (1) Except with the written permission of the Director, no person may operate any South African registered aircraft unless its current empty mass has been established by means of a mass meter and its centre of gravity computed within the preceding five years.
- (2) Whenever alterations are made which could influence an aircraft's empty mass or its centre of gravity, the mass and balance data shall be amended.
- (3) An aircraft's empty mass shall be established by means of computation or by means of a mass meter by an appropriately approved AMO or a person acceptable to the Director. The aircraft's new centre of gravity shall be computed thereafter.
- (4) The mass meter to be used shall, within the periods of 12 months immediately preceding the date of determination of the aircraft's empty mass,
 - (a) have been certified by a Government Assize Officer; or
 - (b) if an electronic mass meter, have been tested by the South African Bureau of Standards or a similar body acceptable to the Director.
- (5) The mass and centre of gravity data, as supplied by the manufacturer in respect of new aircraft, shall be acceptable for the purpose of this regulation for the first five-year period, provided that the empty mass was established by means of a mass meter.
- (6) For the purpose of this regulation, the empty mass of an aircraft (as ascertained when the mass was last determined or computed) shall be the mass of the aircraft and its powerplant(s), including any engine coolant, unusable fuel, total oil, total hydraulic fluid, any fixed ballast, and all items of fixed equipment.
- (7) Notwithstanding the provisions of the preceding sub-regulations, the Director may at any time, when he or she deems it necessary in the interest of aviation safety, require the mass of any aircraft to be established by means of a mass meter or its centre of gravity to be computed.
- (8) The procedure to establish mass and the form on which the results of balance computations must be recorded is prescribed in the Document SA-CATS 43.

Mandatory inspections

- **43.02.8** (1) Mandatory tests and inspections shall be carried in accordance with the approved maintenance schedule for a particular aircraft at the prescribed times or intervals.
- (2) Mandatory inspections include
 - (a) for aeroplanes with a MCM of 5 700 kg or less or a maximum approved passenger seating configuration of not more than 9 seats, and for helicopters with a MCM of 3 175 kg or less or a maximum approved passenger seating configuration of not more than 9 seats
 - (i) a mandatory periodic inspection; and
 - (ii) inspections in accordance with an approved progressive inspection programme;
 - (b) for any aircraft, other than those referred to in paragraph (a), the approved maintenance schedule for the particular category and type of aircraft at the intervals prescribed by the schedule.
- (3) An aircraft referred to in sub-regulation (2)(a)(i) that has not accumulated 100 hours within 12 months since its last inspection shall undergo a mandatory periodic inspection before it is being released to service.
- (4) An aircraft referred to in sub-regulation (2) (a) (ii) that has not completed its progressive inspection programme within the period specified by the manufacturer or the Director shall undergo the remainder of the progressive inspection programme before it is being released to service.
- (5) The maintenance schedules referred to in sub-regulation (1) are defined in Document SA-CATS 43.

Air speed indicator and altimeter system tests and inspections

- **43.02.9** Any person who carries out air speed indicator and altimeter system tests and inspections shall
 - (a) perform the tests and inspections as prescribed in Document SA-CATS 43; and
 - (b) for the altimeter tests, record on the altimeter case, the date on which and maximum altitude to which the altimeter has been tested.

ATC transponder tests and inspections

43.02.10 Any person who carries out ATC transponder tests and inspections shall perform the tests and inspections as prescribed in Document SA-CATS 43.

Emergency locator beacon tests and inspections

43.02.11 Any person who carries out emergency locator beacon tests and inspections shall perform the tests and inspections as prescribed in Document SA-CATS -43.

Inspection requirements

43.02.12 Any person who carries out an inspection shall –

- (a) carry out the inspection so as to determine that the aircraft or aircraft component under inspection, complies with all appropriate airworthiness requirements prescribed in Part 21 and
- (b) if carrying out a mandatory periodic inspection, progressive inspection or scheduled inspection, use a checklist, which includes the scope and detail of the tests and inspections, referred to in regulation 43.02.8.

Non-destructive testing

- **43.02.13** Any person who performs a non-destructive test on an aircraft, aircraft component or aircraft part shall
 - (a) be a holder of a certificate appropriate to the technique being used and to the level of qualification required, as specified in Document SA-CATS 43, or an equivalent certificate approved by the Director;
 - (b) perform the non-destructive test using appropriate methods, techniques and standard practices, as specified in Document SA-CATS 43; and
 - (c) use test equipment necessary to ensure that the non-destructive test is performed in accordance with the appropriate manufacturer's requirements.

Airworthiness limitations

43.02.14 Any person who carries out maintenance specified in the airworthiness limitations section of a manufacturer's maintenance manual, or any instructions for safe operation and continued airworthiness, shall carry out the maintenance in accordance with that section.

Modifications

- **43.02.15** (1) No person shall, without approval of the Director, carry out any modifications to a type certificated aircraft, including changes to equipment or the installation thereof, which affect, or are likely to affect, the serviceability of the aircraft, or the safety of its occupants or of any other persons or property.
- (2) Before the approval of the Director is considered for a modification as referred to in subregulation (1), the owner of the aircraft, or any other person who applies for the modification, shall –
 - (a) furnish the Director with such information, data, calculations, reports on tests, drawings or wiring diagrams relating to the design, and proof of effectiveness or airworthiness of such modification, as the Director may require; and
 - (b) pay the appropriate fee as prescribed in Part 187.
- (3) Notwithstanding the provisions of sub-regulations (1) and (2), such modifications as may from time to time be recommended by the manufacturer of the type of aircraft or equipment concerned, may be carried out if the modifications are carried out in accordance with the said manufacturer's recommendations.

Test flights

- **43.02.16** (1) After any major repair or major modification to an aircraft, test flights shall be carried out in the aircraft under such conditions and in the manner as prescribed in the SACATS 43.
- (2) Only essential crew shall be carried aboard any aircraft undergoing a test flight.

Temporary and permanent repairs after accidents or incidents

- **43.02.17** (1) Any repair to an aircraft or aircraft component, which has been damaged after an accident or an incident, shall be carried out in accordance with the requirements as prescribed in Document SA-CATS 43.
- (2) Following the permanent repair of an aircraft that has been involved in an accident, as defined in paragraph (b) of the definition of 'accident' in Part 1 of these Regulations, the aircraft shall be inspected by an authorised officer, inspector or authorised person of the Authority, or another person specifically appointed for the purpose in writing by the Director, before it is released to service.
- (3) The maintenance organisation or repair facility that carried out the repair shall pay the applicable inspection fees as prescribed in Part 187.

Aircraft compass requirements

43.02.18 Any compass fitted to an aircraft shall be swung and maintained in accordance with the requirements as prescribed in Document SA-CATS 43.

Extended range twin turbine-engine operations (ETOPS)

43.02.19 The additional maintenance requirements for twin-engine turbine aeroplanes certified for extended-range operations are prescribed in Document SA-CATS 43.

RVSM Operations

43.02.20 The additional maintenance requirements for aircraft holding an RVSM approval certificate are prescribed in Document SA-CATS 43.

Aircraft withdrawn from service for storage

- **43.02.21** (a) Aircraft withdrawn from service for storage shall meet the preservation instructions of the aircraft's manufacturer as prescribed in the relevant maintenance manuals, service bulletins, service letters or service instructions for the inoperative period.
- (b) Before such an aircraft is returned to service, any prescribed maintenance shall be carried out prior to release to service.

Suspected, unapproved parts

43.02.22 Any Class I, Class II or Class III part, component or product, whether new or previously used, for which no historical records are available or traceable, or for which the available records do not confirm that they have been approved by a responsible aviation authority, shall be considered to be unserviceable and may not be fitted to any type-certificated aircraft.

SUBPART 3: RECORDING OF MAINTENANCE

Maintenance records

- **43.03.1** (1) Any person who carries out maintenance on an aircraft or aircraft component shall record, on completion of the maintenance
 - (a) details of the maintenance including, where applicable, the type of inspection and any approved data used;
 - (b) for a mandatory periodic, progressive or scheduled inspection, whether a detailed inspection or routine inspection of the particular components or areas of the aircraft was carried out:
 - (c) the serial numbers, if any, of components removed or fitted;
 - (d) details of measurements or test results obtained, including the results of any ground or air tests:
 - (e) for an air speed indicator or altimeter system pilot static test and inspection, the date on which, and maximum altitude to which the altimeter has been tested;
 - (f) the date of completion of such maintenance;
 - (g) the references to the documents used to carry out the maintenance and their revision status;
 - (h) the name of the person completing such maintenance, if other than the person certifying the release to service;
 - (i) the location and, if applicable, the name of the facility where such maintenance was carried out; and
 - (j) where such maintenance has been carried out as a consequence of the failure of any equipment, or damage caused by forced landing or accident, the reasons for carrying out the maintenance.
- (2) The person who carries out the maintenance shall
 - (a) record the details referred to in sub-regulation (1) in the appropriate logbook or in a maintenance record approved by the Director;
 - (b) where worksheets or other associated maintenance records are used to document the details of the maintenance, make a reference to those records in the logbook, flight folio or in the maintenance record approved by the Director.
- (3) The manner for completion of logbooks, flight folios and maintenance records, referred to in sub-regulation (2), and the period for which such documents shall be retained are prescribed in SA-CATS 43.

Recording of overhaul

- **43.03.2** No person shall state in any maintenance document entry required by the Regulations, including a job card, logbook or a certificate of release to service, that an aircraft, airframe, engine or engine module, propeller, rotor, appliance or other aircraft component has been overhauled unless it has been
 - (a) disassembled, cleaned, inspected, repaired as necessary, and reassembled, using methods, techniques and practices acceptable to the Director; and
 - (b) tested to the original tolerances and limits or to approved oversize or undersize dimensions in accordance with
 - (i) current approved standards and technical data that have been developed and documented by the holder of a type certificate or supplemental type certificate issued in terms of Part 21 in a manual, airworthiness directive, service letter, service bulletin or other similar document declared mandatory by the Director; or
 - (ii) other standards or technical data approved by the Director.

Recording of major repairs and modifications

43.03.3 Any person who carries out a major repair or a major modification shall, in addition to the entry referred to in regulation 43.03.1, record the repair or modification and process the certificate relating to the maintenance of the aircraft in the manner as prescribed in Document SA-CATS 43.

Recording of inspection and certification

- **43.03.4** (1) Any inspection prescribed in regulation 43.02.8 must be recorded in the appropriate logbook(s) and mandatory inspections or any maintenance to an aircraft issued with a standard category certificate of airworthiness must be certified by the holder of an AMO approval with the appropriate ratings.
- (2) Any aircraft on which the last mandatory inspection was certified by the holder of an AME licence and for which the issue of a standard category certificate of airworthiness in terms of Part 21 is requested, shall be inspected and certified by the holder of an appropriately-rated approved AMO.
- (3) Any overhaul classed as mandatory for aircraft issued with a standard category certificate of airworthiness shall be carried out at the times specified and be certified in the prescribed manner by an appropriately rated approved AMO only.
- (4) Any additional work, performed during an inspection, shall be recorded on a checklist and be certified in the relevant logbook(s) by the responsible AME or by an authorised person in the AMO concerned.
- (5) Records pertaining to life-limited or previously used parts must be available and traceable. Parts with no historical record shall be considered to be unserviceable and such parts shall not be fitted to an aircraft.

Annual review of maintenance

- **43.03.5** Any person who carries out and certifies an annual review of maintenance for an aircraft shall enter
 - (a) the statement as prescribed in Document SA-CATS 43, in the aircraft logbook or other technical record approved by the Director;
 - (b) his or her signature, licence or authorised number, and the date on the entry; and
 - (c) in the appropriate section of the aircraft technical log, the date of the review.

SUBPART 4: RELEASE TO SERVICE

Persons to certify release to service

- **43.04.1** (1) No person shall certify an aircraft or aircraft component for release to service after maintenance unless such person
 - (a) is the holder of an AME licence with an appropriate rating issued in terms of Part 66;
 - (b) is authorised by the holder of an AMO approval with an appropriate rating issued in terms of Part 145, to certify maintenance within the scope of such approval;
 - (c) is authorised by the Director to certify an aircraft or aircraft component for release to service; or
 - (d) for maintenance carried out outside the Republic, holds a licence or equivalent authorisation issued by an appropriate authority acceptable to the Director, for the type of aircraft or aircraft component.
- (2) The holder of a pilot licence with an appropriate type rating issued in terms of Part 61 or Part 62 may certify maintenance which has been carried out in accordance with the conditions referred to in regulation 43.02.2(2).

Requirements for certifying release to service

43.04.2 No person shall certify an aircraft or aircraft component for release to service after maintenance unless such maintenance has been carried out in accordance with the provisions of this Part and the aircraft or aircraft component is fit for release to service.

Validity of a certificate of release to service

- **43.04.3** (1) A certificate of release to service for an aircraft shall be validated for a period not exceeding 12 months or 100 hours of flight time, whichever comes first, or such other time as approved in the progressive inspection programme referred to in regulation 43.02.8(2)(a)(ii).
- (2) When a certificate of airworthiness becomes invalid due to an aircraft sustaining a defect not affecting the primary structure, the validity of the certificate is restored when the defect has been rectified and the necessary certification has been made.
- (3) When a certificate of airworthiness becomes invalid due to an aircraft sustaining a serious defect in an accident or incident that affects the serviceability of a Class I product, the certificate of release to service shall be invalidated.

Certifying after inspection

- **43.04.4** Any person who certifies an aircraft or aircraft component for release to service after carrying out an inspection shall enter in the appropriate logbook or other maintenance record approved by the Director
 - (a) the statement as prescribed in Document SA-CATS 43; and
 - (b) his or her signature, licence or authorisation number and the date of the entry.

Certifying after maintenance

- **43.04.5** (1) Any person who certifies an aircraft or aircraft component for release to service after maintenance shall enter in the appropriate logbook or other maintenance record approved by the Director
 - (a) the statement as prescribed in Document SA-CATS 43; and
 - (b) his or her signature, licence or authorisation number and the date of the entry.
- (2) If components are not installed in or allocated to an aircraft, the person certifying release to service shall certify the release to service on the appropriate prescribed form.

Discrepancies

- **43.04.6** Any person who carries out an inspection and who does not release the aircraft or aircraft component to service shall
 - (a) provide the owner or operator with a signed and dated list of the discrepancies, including any equipment which is marked "inoperative" in terms of paragraph (c);
 - (b) do so, if such person is satisfied that the aircraft
 - (i) is not airworthy; or
 - (ii) does not comply with the applicable type certificate data, airworthiness directives or other approved data upon which the airworthiness of such aircraft depends;
 - (c) for those items, which appear to be imperative, place a label on each inoperative instrument and the cockpit controls of each item of inoperative equipment, marking each item "inoperative";
 - (d) enter the date of entry, his or her signature, licence or authorisation number and the appropriate statement, as prescribed in Document SA-CATS 43, in the appropriate logbook or flight folio.

Flight manual data

43.04.7 If the approved data for a repair or modification to an aircraft or aircraft component include changes to the operating limitations or flight data in the AFM, the person certifying release to service shall not certify the release to service until the changes have been incorporated into the flight manual.

Duplicate inspection of controls

- **43.04.8** (1) No person shall certify an aircraft component for release to service after the initial assembly, subsequent disturbance or adjustment of any part of an aircraft or component control system unless
 - (a) a duplicate safety inspection of the control system has been carried out; and
 - (b) the duplicate safety inspection is recorded and certified in the appropriate logbook, or other maintenance record approved by the Director.
- (2) A duplicate safety inspection authorised in terms of sub-regulation (1), shall consist of
 - (a) an inspection by a person referred to in regulation 43.04.1 to certify the release to service of the control system after maintenance; and
 - (b) a second inspection carried out by another person who is a person referred to in regulation 43.04.1.

Ground running checks - reciprocating engines

- **43.04.9** No person shall certify a reciprocating engine-powered aircraft for release to service after a mandatory inspection unless such person ensures that
 - (a) a ground run of the aircraft engine has been carried out to determine satisfactory performance, in accordance with the manufacturer's recommendations, for
 - (i) the power output (static and idle RPM);
 - (ii) the ignition system;
 - (iii) the fuel and oil pressure; and (iv) the cylinder or coolant temperature, and oil temperature; and
 - (b) the ambient conditions of temperature and atmospheric pressure and details of the results are recorded
 - (i) in the appropriate engine or aircraft logbook; and
 - (ii) in the maintenance record.

Ground running checks - turbine engine

- **43.04.10** No person shall certify a turbine engine-powered aircraft for release to service after a mandatory inspection unless such person ensures that
 - (a) a ground run of the aircraft engine has been carried out to determine satisfactory performance, in accordance with the manufacturer's recommendations;
 - (b) the ambient conditions of temperature and atmospheric pressure and details of the results are recorded;
 - (c) the engine parameters are recorded in accordance with the manufacturer's recommendations
 - (i) in the appropriate engine or aircraft logbook; or
 - (ii) in the maintenance record.

Flight folio completion

- **43.04.11** (a) No person shall certify an aircraft or aircraft component for release to service in an aircraft flight folio unless each applicable section of the flight folio has been completed.
- (b) This includes the section where any rectification of deferred defects must be recorded.

PART 44: MAINTENANCE RULES - NON-TYPE CERTIFICATED AIRCRAFT

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44.01.1	Falsification, reproduction or alteration of maintenance documents
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SUBPART 2: PRIVATE NON-TYPE CERTIFICATED AIRCRAFT USE

44.02.1 Accepted maintenance schedule

SUBPART 3: COMMERCIAL NON-TYPE CERTIFICATED AIRCRAFT USE

44.03.1 Accepted maintenance schedule

SUBPART 1: GENERAL

Falsification, reproduction or alteration of maintenance documents

44.01.1 No person shall make or cause to be made –

- (a) any fraudulent or false entry in any record, which is required to be made, kept or used to show compliance with any requirements prescribed in this Part.
- (b) any reproduction or alteration for fraudulent purposes, of any record or report made in terms of the provisions of this Part.

Logbooks

- **44.01.2** (1) Subject to the provisions of sub-regulation (2), the following logbooks shall be kept in respect of South African registered non-type certificated aircraft and other specified equipment for the purpose of recording therein the maintenance history of the equipment to which each relates:
 - (a) a single approved aircraft logbook. The logbook may also be used as the engine, propeller and airframe logbook; or
 - (b) an approved logbook for -
 - (i) the aircraft airframe.
 - (ii) the engine(s), one logbook per engine.
 - (iii) the propeller(s), one logbook per propeller. In the case of a fixed pitch propeller the airframe logbook may be used as the propeller logbook.
 - (c) In the event that existing logbooks in accordance with paragraph (b), above, have been used, then the logbooks in accordance with paragraph (b), above, shall continue to be used.
- (2) Certain non-type certificated aircraft are exempted from the provisions of sub-regulation (1) in terms of regulation 94.03.2.
- (3)(a) Logbooks shall not be kept in the aircraft under any circumstances.
- (b) It is the owner's responsibility to keep the logbooks in a safe place.
- (4) All logbooks shall be made available to an authorised officer, an inspector or an authorised person at all times for inspection.

- (5) For an aircraft with an approved separate system as specified in its accepted maintenance schedule, for the purposes of component and major repair tracking, the logbook(s) must refer to this system and must meet the requirements as prescribed for logbooks.
- (6) The format of the logbook(s) is prescribed in Document SA-CATS 44.
- (7) The logbook(s) shall be preserved for a period of not less than six months from the date of destruction of the airframe, engine or propeller for which they were kept unless the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, has prescribed a longer period in respect of the logbooks of an aircraft, its engine(s) or propeller(s) involved in an accident or incident.
- (8) Logbook(s) shall not be carried in the aircraft to which they relate. In the case where logbook(s) are needed for maintenance purposes and no other means of forwarding such logbook(s) are reasonably available, the logbook(s) are to be carried in the relevant aircraft.
- (9) Entries in the logbook(s) required to be kept in accordance with sub-regulation (1) shall be effected and signed by an appropriately rated approved AMO, AME or Approved Person, rated in accordance with Subpart 4 of Part 66.
- (10) The logbook(s) shall be kept up to date and maintained in a legible and permanent manner and in accordance with the instructions for use as prescribed in Document SA-CATS 44.

Loss of logbooks

- **44.01.3** (1) When the registered owner of an aircraft reports the loss of a logbook currently in use, a request to open a substitute logbook shall be made in writing accompanied by an affidavit which includes the last available logbook entries as signed by an appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66.
- (2) Once the opening of a new logbook has been approved, the relevant authorisation shall be made a permanent part of that logbook.
- (3) The procedure to be followed for the opening of a substitute logbook is prescribed in SACATS 44.
- (4) When a logbook has been lost, the authority to fly shall be considered invalid until such time that all the requirements for the opening of a substitute logbook have been met.

Persons to carry out maintenance

- **44.01.4** (1) No person may carry out maintenance on an amateur built aircraft or a production-built non-type certificated aircraft, or any component thereof, unless such person –
- (a) is appropriately rated or approved on type by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, to carry out maintenance; or

- (b) carries out the maintenance under the prescribed supervision of a person authorised by the Director or by the organisation referred to in paragraph (a). A dual check of the maintenance carried out must be performed by a person referred to in sub-paragraph (a); or
- (c) is the owner of the aircraft provided that an appropriately rated approved AMO, AME or Approved Person, rated in accordance with Subpart 4 of Part 66, performs a dual check on the maintenance which was carried out; or
- (d) is an appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66.
- (2)(a) Components and parts intended to be used on non-type certificated aircraft may be fabricated by a person or organisation not licensed in terms of Part 66 or Part 145.
- (b) The owner of the aircraft must provide the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, with evidence that the components or parts meet the minimum specification for the component or part as specified by the Original Equipment Manufacturer.
- (c) An appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66 shall sign off the component or part in the appropriate logbook.

Rectification of unsatisfactory items

- **44.01.5** (1) When during maintenance or at any other time any part, product, component, equipment or item is found to be unserviceable or is unlikely to remain serviceable under normal operating conditions during the period preceding the next inspection, such rectification action as considered necessary shall be taken to ensure the continued serviceability of the part, component or item prior to releasing the aircraft to service.
- (2) Any maintenance carried out to restore the serviceability of any part, component, equipment or item shall be clearly recorded in the relevant logbook.
- (3) For the case when an unsatisfactory item cannot be rectified an entry shall be made into the relevant logbook by an appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66, stating any limits to the serviceability of the aircraft.

Annual inspections

- **44.01.6** (1) A non-type certificated aircraft, specified in regulation 24.01.1(1) and classified in paragraphs (a) to (g) of regulation 24.01.1(2) shall undergo an annual inspection no later than 365 days since the previous annual inspection, or an inspection equivalent to an annual inspection, was carried out.
- (2) The items to be inspected as part of an annual inspection are those listed in Document SA-CATS 44 for the particular type of aircraft, and shall be incorporated in the accepted maintenance schedule.

- (3) The annual inspection shall be recorded in the aircraft logbook and certified by the organisation or person by whom, or under whose prescribed supervision, the annual inspection was carried out.
- (4) Within 30 days from the day that the annual inspection is completed, the annual inspection form, as prescribed in Document SA-CATS 44, shall be completed and forwarded to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, together with the currency fee prescribed in regulation 24.02.8.
- (5) The inspection, prior to the issue of a proving flight authority and the inspection prior to the issue or reissuing of an authority to fly of an amateur-built or production-built aircraft, referred to in regulation 24.02.2(5)(d), shall be carried out by an appropriately rated approved person who may not be the owner of the aircraft, even if the owner is also an appropriately rated approved person.

Periodic and other inspections

- **44.01.7** (1) In addition to the annual inspection, referred to in regulation 44.01.6, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may prescribe additional periodic inspections for non-type certificated aircraft depending on the type of aircraft and its intended use.
- (2) A schedule, reflecting the periodic inspections prescribed in sub-regulation (1) shall be incorporated in the accepted maintenance schedule, referred to in regulation 44.02.1 or regulation 44.03.1, as applicable.
- (3) In addition to the periodic inspections, referred to in sub-regulation (1), the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may prescribe, by way of a Mandatory Airworthiness Notice, any additional inspection of a non-type certificated aircraft if considered necessary in the interest of safety.

Mandatory maintenance and inspections

44.01.8 All special inspections and modifications prescribed by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, to detect and correct an unsafe condition of a non-type certificated aircraft shall be considered mandatory.

Mass and balance

- **44.01.9** (1) Except with the written permission of the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, no person may operate a South African non-type certificated aircraft unless its current empty mass has been established by means of a suitable mass meter and its centre of gravity computed within the preceding five years as prescribed in Document SA-CATS 44.
- (2)(a) The empty mass and centre of gravity of an aircraft shall be determined before any proving flight authorization is issued.

- (b) The mass and centre of gravity data must be signed by an appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66.
- (c) The appropriate form is prescribed by the Director.
- (3) The person who is responsible for establishing the mass and the computing of the centre of gravity of the aircraft shall make an appropriate entry in the airframe logbook of the aircraft concerned.

Modifications

- **44.01.10** (1) If a person intends to carry out any modifications, including changes to equipment or the installation thereof, which affect, or are likely to affect, the serviceability of the aircraft, or the safety of its occupants or any other persons or property, in relation to an amateur built aircraft or a production built aircraft –
- (a) in the case of a minor modification a notification of the modification must be submitted to the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, within 30 days of the modification being performed. All subsequent modifications shall be an amendment to the build standard:
- (b) in the case of a major modification an application for the approval of the modification and authority to fly, as prescribed in Document SA-CATS 44, must be submitted to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, before the modification has been performed.
- (2) The application referred to in sub-regulation (1) must be accompanied by the appropriate fee as described in Part 187.
- (3) All approved modifications shall be entered into the appropriate logbook(s).
- (4) An appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66 shall sign in the appropriate logbook(s) that all procedures, as stated in the application for modification, were adhered to and that he or she is satisfied with the quality of the work which was carried out.

Test flights

- **44.01.11** (1) After any major repair or major modification to an aircraft, test flights shall be carried out in the aircraft under such conditions and in the manner as prescribed in the Document SA-CATS 44.
- (2) Only essential crew, as required for the purpose, shall be carried aboard any aircraft undergoing a test flight

Aircraft compass requirements

- **44.01.12** (1) Any compass fitted to a non-type certificated aircraft shall be swung and maintained in accordance with the requirements as prescribed in Document SA-CATS 44.
- (2) Notwithstanding sub-regulation (1), alternate means of direction indication may be installed in non-type certificated aircraft according to regulation 44.01.10.
- (3) Maintenance for all direction indication equipment must be carried out initially and thereafter every 5 years and in the event of an equipment modification which could affect it, as prescribed in Document SA-CATS 44.

Release to Service

- **44.01.13** (1) The release to service for an aircraft shall be issued in the prescribed format subject to the compliance with the accepted maintenance schedule as prescribed in regulation 44.02.1 or 44.03.1, as applicable.
- (2) In the case of a non-type certificated aircraft operated in terms of
 - (a) Part 94, the release to service shall be confirmed by the aircraft owner following simple line maintenance or the annual inspection.
 - (b) Part 96 or Part 141, the release to service shall be issued by an appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66.
- (3) The format for the issuing of the release to service shall be that as prescribed.

Record keeping and audits

- **44.01.14** (1) Unless specifically exempted in terms of Part 94, the owner of a non-type certificated aircraft, classified in paragraphs (a) to (g) of regulation 24.01.01(2), shall maintain accurate maintenance records in accordance with sub-regulation (3) and as prescribed in Document SA-CATS 44.
- (2) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may from time to time carry out audits of the equipment, records and procedures to ascertain whether the aircraft continues to be maintained in a safe and satisfactory manner, and the owner shall allow unrestricted access thereto.
- (3) A person who carries out maintenance on a non-type certificated aircraft or aircraft component shall record, on completion of the maintenance all details as specified in the Document SA-CATS 44.

Entries of special significance

44.01.15 When repairs to an aircraft, aircraft engine or component or fixed or removable equipment were required in consequence either of damage caused by an irregular occurrence other than an accident, the entry or entries made in the relevant logbook(s) in respect of such

repairs shall state that they were so required and shall identify the irregular occurrence in question.

Overhaul, repair and substitution of major components

- **44.01.16** (1) Overhaul of a Class I or Class II product and repairs to the primary structure of an aircraft, its engine(s) or propeller(s) shall be signed out by an appropriately rated approved AMO, AMEor approved person, in terms of Subpart 4 of Part 66.
- (2) The procedure for the reissuing of a proving flight authority or authority to fly which is deemed to have been suspended when an aircraft is involved in an accident that renders one or more Class I products defective, is prescribed in Document SA-CATS 44.
- (3) Where the manufacturer's instruction or recommendation has not been complied with, such components or equipment must be overhauled as and when their condition shows that it is necessary to keep the aircraft serviceable.
- (4)(a) In the case of an aircraft operated in terms of Part 94, a component or part may be fitted to an aircraft for which traceable records are not available.
- (b) It shall be the responsibility of the appropriately rated approved AMO, AME or approved person, in terms of Subpart 4 of Part 66, to ensure that the component or part is acceptable in fit, form and function.
- (5) (a) Notwithstanding the provisions of sub-regulation (2), non-type certificated aircraft operated under Part 96 or Part 141where the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, has approved a time between overhauls that differs from that recommended or specified by the manufacturer, such time between overhauls shall be specified in the aircraft's accepted maintenance schedule, referred to in regulation 44.03.1.
- (b) Furthermore, where a manufacturer has not recommended or specified the overhaul of an item at certain times but where the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, considers its overhaul at certain intervals necessary in the interest of safety, he or she may prescribe a time between overhauls for such item in the aircraft's accepted maintenance schedule.
- (c) The requirements for the substitution of products, components and parts with new or overhauled items are those prescribed in Document SA-CATS 24.
- (d) No part may be fitted to an aircraft for which traceable records are not available. The appropriately rated approved AMO, AME or approved person, in terms of Subpart 4 of Part 66, is responsible for ensuring that any part received comes from a reliable source and is serviceable, and that the storage limitations have not been exceeded. Substitutions must be certified by the holder of an appropriately rated licence or authorisation.

Temporary and permanent repairs after accidents

- **44.01.17**(1) Any repair to an aircraft or aircraft component, which has been damaged after an accident, shall be carried out in accordance with the requirements as prescribed in Document SA-CATS 44.
- (2) Following the permanent repair of an aircraft that has been involved in an accident, as defined in paragraph (b) of the definition of 'accident' in Part 1, the aircraft shall meet requirements for the initial authority to fly.

SUBPART 2: PRIVATE NON-TYPE CERTIFICATED AIRCRAFT USE

Acceptance of maintenance schedule

- **44.02.1** (1) The owner of a non-type certificated aircraft for which a authority to fly is required in terms of these regulations shall submit to the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, for acceptance, a maintenance schedule or document similar to Annex A in Document SA-CATS 44, for the aircraft.
- (2) A non-type certificated aircraft, specified in regulation 24.01.1(1) and classified in the paragraphs (a) to (j) of regulation 24.01.1(2), shall be maintained in accordance with its accepted maintenance schedule in such a manner that it is airworthy at the commencement of any flight.
- (3)(a) Any non-type certificated aircraft, other than those referred to in sub-regulation (1) above, shall be maintained by or on behalf of its owner in such a manner that it is airworthy at the commencement of any flight.
- (b) Where the aircraft manufacturer or any approved organisation has issued maintenance instructions or guidelines, these instructions or guidelines, should be adhered to.

SUBPART 3: COMMERCIAL NON-TYPE CERTIFICATED AIRCRAFT USE

Acceptance of maintenance schedule

- **44.03.1** (1) The owner of a non-type certificated aircraft for which an authority to fly is required shall submit to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, for acceptance a maintenance schedule or document similar to Annex A in Document SA-CATS 44, for the aircraft.
- (2) A non-type certificated aircraft, specified in regulation 24.01.1(1) and classified in paragraphs (a) to (j) of regulation 24.01.1(2), shall be maintained in accordance with its accepted maintenance schedule in such a manner that it is airworthy at the commencement of any flight.
- (3) In the event that the aircraft is operated under Part 96, the Accepted Maintenance Schedule, referred to in sub-regulation (1) shall –

- (a) prescribe the ratings of an appropriately rated approved AMO, AME or approved person, rated in accordance with Subpart 4 of Part 66.
- (b) specify any special conditions under which maintenance shall be carried out; and
- (c) be in the prescribed format.
- (4)(a) Any non-type certificated aircraft, other than those referred to in sub-regulation (1) above, shall be maintained by or on behalf of its owner in such a manner that it is airworthy at the commencement of any flight.
- (b) Where the aircraft manufacturer or any approved organisation has issued maintenance instructions or guidelines, these instructions or guidelines shall be adhered to.

Maintenance control manual

44.03.2 An owner or operator shall include a maintenance control manual in the format prescribed in Document SA-CATS 44, where such owner or operator is required in terms of Part 96 to maintain an operations manual. .

PART 47: REGISTRATION AND MARKING

List of regulations

47.00.1	Applicability
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47.00.11	Application for cancellation of registration
47.00.12	Cancellation of registration
47.00.13	Duration of certificate of registration
47.00.14	South African Civil Aircraft Register

Applicability

47.00.1 This Part applies to –

- (a) the registration of aircraft used in the Republic; and
- (b) the nationality, registration and marking of South African registered aircraft.

- (2) This Part does not apply to -
 - (a) hang-glider;
 - (b) paraglider;
 - (c) unmanned free balloon;
 - (d) captive balloon;
 - (e) kite;
 - (f) model aircraft;
 - (g) foreign registered aircraft;
 - (h) parachute; or
 - (i) powered paraglider.

Requirement for aircraft registration

- **47.00.2** The owner of an aircraft shall, if the aircraft flies to, from, within or over the Republic, hold a valid certificate of registration for such aircraft issued by
 - (a) the Director, in the case of an aircraft to be registered in the Republic, including any
 - (i) amateur-built aircraft; and
 - (ii) production-built aircraft; or
 - (b) an appropriate authority in the case of any other aircraft not to be registered in the Republic.

Requirement for aircraft marking

- **47.00.3** (1) The Director shall be responsible for the allocation of nationality and registration marks to be displayed on South African registered aircraft.
- (2) Upon the registration of an aircraft in terms of regulation 47.00.6(1), the Director may
 - (a) if the aircraft was previously registered in the Republic, allocate the same registration marks as were originally borne by such aircraft, if the registration marks are still available; or
 - (b) allocate special registration marks as requested by the applicant: Provided that the application for registration is
 - (i) accompanied by the appropriate fee as prescribed in Part 187; and
 - (ii) is made in the appropriate prescribed form.
- (3) No person shall use a South African registered aircraft unless such aircraft displays a nationality mark and a registration mark in the manner, and in accordance with specifications as prescribed in Document SA-CATS 47.
- (4) No person shall place on any South African registered aircraft any mark or symbol which modifies, confuses or purports to be the nationality or registration mark allocated and displayed in accordance with the specifications referred to in sub-regulation (3).

Nationality of aircraft

47.00.4 Aircraft registered on the South African Civil Aircraft Register shall be deemed to have South African nationality.

Application for registration

- **47.00.5** (1) An application for the registration of an aircraft and the issuing of a certificate of registration shall be made to the Director in the appropriate prescribed form.
- (2) An application referred to in sub-regulation (1) shall be accompanied by
 - (a) in the case of an aircraft which is imported into the Republic for the first time or returns to the Republic and has to be re-registered on the register in terms of Part 21
 - (i) a certificate or notification of cancellation from the appropriate authority of the State or territory in which the aircraft was last registered; or
 - (ii) a certificate or notification of non-registration from the appropriate authority of the State or territory from which the aircraft is imported; and
 - (iii) the original of -
 - (aa) the valid certificate of airworthiness issued by the appropriate authority of the last State or territory from which the aircraft is imported; or
 - (bb) the export certificate of airworthiness issued by the appropriate authority of the State or territory from which the aircraft is imported; and
 - (iv) confirmation that a type acceptance certificate has been issued by the Director; and
 - (v) the supporting documents from the South African Revenue Service issued in terms of section 38, 39 or 44 of the Customs and Excise Act, 1964, as prescribed in Document SA-CATS 47:
 - (b) in the case of a non-type certificated aircraft which is imported into the Republic for the first time or returns to the Republic and has to be re-registered on the register in terms of Part 24, if a –

(i) Production-built aircraft

- (aa) a certificate or notification of cancellation from the appropriate authority of the State or territory in which the aircraft was last registered; or
- (bb) a certificate or notification of non-registration from the appropriate authority of the State or territory from which the aircraft is imported; and
- (cc) a copy of the certificate of conformity issued by the manufacturer;
- (dd) the original of -
 - (A) the valid authority to fly or flight permit or other similar document, as the case may be, issued by the appropriate authority of the State or territory in which the aircraft was last registered; or

- (B) an export authority to fly or flight permit or other similar document, as the case may be, issued by the appropriate authority of the State or territory from which the aircraft is imported;
- (ee) confirmation that a certificate of acceptance for the non-type certificated aircraft has been issued by the Director;
- (ff) the supporting documents from the South African Revenue Service issued in terms of section 38, 39 or 44 of the Customs and Excise Act, 1964, as prescribed in the Document SA-CATS 47.

(ii) Amateur-built aircraft

- (aa) a certificate or notification of cancellation from the appropriate authority of the State or territory in which the aircraft was last registered; or
- (bb) a certificate or notification of non-registration from the appropriate authority of the State or territory from which the aircraft is imported; and
- (cc) the original of -
 - (A) the valid authority to fly or flight permit or other similar document, as the case may be, issued by the appropriate authority of the State or territory in which the aircraft was last registered; or
 - (B) an export authority to fly or flight permit or other similar document, as the case may be, issued by the appropriate authority of the State or territory from which the aircraft is imported;
- (dd) the supporting documents from the South African Revenue Service issued in terms of the Customs and Excise Act of 1964, section 38, 39 and 44 as prescribed in the Document SA-CATS 47:
- (c) in the case of an aircraft that is locally manufactured or assembled and has to be registered in the Republic for the first time, or returns to the Republic and has to be reregistered in terms of Part 21:
 - (i) a copy of the certificate of conformity issued by the manufacturer; and
 - (ii) a copy of the type certificate issued by the Director:
- (d) in the case of a non-type certificated aircraft that is locally manufactured or assembled and has to be registered in the Republic for the first time or returns to the Republic terms of Part 24, if a –

(i) Production-built aircraft

- (aa) a copy of the certificate of conformity issued by the manufacturer; and
- (bb) confirmation that a certificate of acceptance of the non-type certificated aircraft has been issued by the Director;

(ii) Amateur-built aircraft - derived from an approved kit

- (aa) a copy of the certificate of conformity issued by the manufacturer; and
- (bb) confirmation that a certificate of acceptance of non-type certificated aircraft has been issued by the Director.

(iii) Amateur-built aircraft – derived from approved plans

- (aa) notification of authorisation for registration issued by the Director;
- (e) in the case of a veteran aircraft or ex-military aircraft that has to be registered in the Republic for the first time or returns to the Republic and has to be re-registered in terms of Part 24, the requirements shall be those prescribed in regulation 47.00.5(2)(b)(i) as applicable;
- (f) if the aircraft is to be registered in the name of an individual, proof of his of her identity;
- (g) if the aircraft is to be registered in the name of a company
 - (i) a certified true copy of its most recent register of directors lodged with the Registrar of Companies in terms of the Companies Act, 2008 (Act No. 71 of 2008);
 - (ii) proof of identity of the director authorised to act on behalf of the applicant; and
 - (iii) the relevant authorising resolution in the appropriate prescribed form;
- (h) if the aircraft is to be registered in the name of a close corporation
 - (i) a certified true copy of its founding statement, approved by the Registrar of Close Corporations in terms of the Close Corporation Act, 1984 (Act No. 69 of 1984);
 - (ii) proof of identity of the member authorised to act on behalf of the applicant; and
 - (iii) the relevant authorising resolution in the appropriate prescribed form;
- (i) if the aircraft is to be registered in the name of a trust
 - (i) a certified true copy of -
 - (aa) the trust instrument; or
 - (bb) the appropriate letter of appointment;
 - (ii) proof of identity of the trustee authorised to act on behalf of the applicant; and
 - (iii) the authorising resolution concerned in the appropriate form as prescribed by the Director:
- (j) if the aircraft is to be registered in the name of any other applicant
 - (i) a certified true copy of any other founding documents;
 - (ii) proof of identity of the person authorised to act on behalf of the applicant; and
 - (iii) the relevant authorising resolution in the appropriate prescribed form;
- (k) the appropriate fee as prescribed in Part 187.
- (3) The Director may exempt an applicant from the provisions of sub-paragraph (a)(iii), sub-paragraph (b)(i)(dd) or sub-paragraph (b)(ii)(cc) of sub-regulation (2), if, the Director is satisfied that such exemption will not jeopardise aviation safety.

Registration and issuing of certificate

- **47.00.6** (1) An application in terms of regulation 47.00.5 is granted, the aircraft registered and a certificate of registration issued on the appropriate form if
 - (a) in the case of an individual, the applicant is a resident of the Republic;
 - (b) in the case of a juristic person, the applicant is registered and has its principal place of business in the Republic; and
 - (c) the aircraft is not registered in any other State or territory.
- (2) Registration of an aircraft and the issuing of a certificate of registration under this part shall not confer or imply ownership of the aircraft.

Duties of holder of certificate

47.00.7 The holder of a certificate of registration shall –

- (a) keep the original certificate of registration in a safe place and produce such certificate to an authorised officer, inspector or authorised person for inspection if so requested by such officer, inspector or person;
- (b) carry a certified true copy of the certificate of registration in the aircraft at all times;
- (c) on an annual basis, confirm to the Director in the appropriate prescribed form-
 - (i) that he, she or it is still the owner of the aircraft;
 - (ii) his, her or its postal and physical address.

Application for amendment of certificate

- **47.00.8** (1) If the holder of a certificate of registration desires to amend
 - (a) the name in which the certificate of registration was issued; or
 - (b) the address on the certificate of registration,

such holder shall apply to the Director for such amendment.

- (2) An application referred to in sub-regulation (1) shall be
 - (a) made in the appropriate prescribed form; and
 - (b) accompanied by -
 - if the aircraft is registered in the name of a company and the name of the company is changed, a certified true copy of the certificate of change of name of a company, approved in terms of the Companies Act, 2008;
 - (ii) if the aircraft is registered in the name of a close corporation and the name of that close corporation is changed, a certified true copy of the amended founding statement of the close corporation, approved in terms of the Close Corporations Act, 1984; and
 - (iii) the appropriate fee as prescribed in Part 187.
- (3) When a bank or other financier registers a mortgage over an aircraft in terms of the Mortgaging of Aircraft Regulations, 1997, the holder of a certificate of registration for such a mortgaged aircraft shall simultaneously apply for an amendment of such certificate in order to have the said certificate endorsed with the details of mortgage, mortgagee, mortgagor and date of registration of the said mortgage.
- (4) An application for amendment referred to in sub-regulation (3) shall be
 - (a) made in the appropriate prescribed form; and
 - (b) accompanied by -

- (i) a certified excerpt from the South African Mortgage Register indicating registration of the said mortgage;
- (ii) the appropriate fee for the amendment by endorsement of a certificate of registration as prescribed in Part 187.
- (5) The Director shall issue the amended certificate in the appropriate prescribed form .

Application for reissuing of certificate

- **47.00.9** (1) If a certificate of registration is lost, stolen, damaged or destroyed, the holder thereof, or an AMO approved under Part 145 and which is responsible for the servicing and maintenance of the aircraft, may apply for the issue of a duplicate of the certificate of registration.
- (2) An application referred to in sub-regulation (1) shall be
 - (a) made in the appropriate form as prescribed in Document SA-CATS 47; and
 - (b) accompanied by the appropriate fee as prescribed in Part 187.
- (3) A duplicate of the certificate of registration shall be issued on the appropriate prescribed form .

Notification of transfer of right of possession of aircraft

- **47.00.10** (1) If the holder of a certificate of registration transfers to another person the right of possession of the aircraft specified in the certificate, such holder shall, within thirty (30) days from the date of transfer notify the Director in the appropriate prescribed form.
- (2) If the holder in whose name the aircraft is registered
 - (a) is an individual and has died, and an executor has been appointed, the notification referred to in sub-regulation (1) shall be accompanied by a certified true copy of the letter of executorship issued in terms of the Administration of Estates Act, 1965 (Act No. 66 of 1965);
 - (b) is an individual and the estate of such holder is sequestrated and a trustee has been appointed, the notification referred to in sub-regulation (1) shall be accompanied by a certified true copy of the certificate of appointment issued in terms of the Insolvency Act, 1936 (Act No. 24 of 1936);
 - (c) is a company or a close corporation and such holder is liquidated and a liquidator has been appointed, the notification referred to in sub-regulation (1) shall be accompanied by a certified true copy of the certificate of appointment issued in terms of the Companies Act, 2008, or the Close Corporations Act, 1984, as the case may be.
- (3) An application for registration by the person to whom the right of possession of the aircraft referred to in sub-regulation (1) is transferred, shall be made in terms of regulation 47.00.5 within thirty (30) days from the date of transfer.

- (4) A certificate of registration shall no longer be valid from the thirty-first day after the date on which the holder of the certificate of registration has transferred to another person the permanent and unconditional right of possession of the aircraft.
- (5) From the date on which a certificate of registration has become invalid in terms of subregulation (4), no person shall use the aircraft specified in the certificate until such time thatthe aircraft is registered in the name of the person to whom the right of possession of the aircraft is transferred.
- (6) (a) From the date on which a certificate of registration has become invalid in terms of subregulation (4), the Director shall prohibit any further flight or operation of such aircraft, by way of written notification to the Air Traffic & Navigation Services Company, as well as the person to whom the right of possession has been transferred.
- (b) Such grounding or prohibition will be valid as from the date of the said notification and may not be uplifted until the latest owner of the aircraft has complied with all such requirements, as prescribed in these Regulations, as may be necessary to issue a new certificate of registration, and has also paid the appropriate fees as prescribed for registration as well as uplifting of such grounding in Part 187.

Application for cancellation of registration

- **47.00.11** (1) If the holder of a certificate of registration desires to transfer the aircraft for permanent use outside the Republic, such holder shall apply to the Director for the cancellation of the registration of such aircraft.
- (2) An application referred to in sub-regulation (1) shall be made in the appropriate prescribed form as , and be accompanied by
 - (a) the original of the last certificate of registration:
 - (b) in the case of an aircraft other than an amateur-built or production- built, the original of the last certificate of airworthiness issued in terms of Part 21;
 - (c) in the case of an amateur-built or production-built aircraft, the original of the last authority to fly issued in terms of Part 24;
 - (d) if the holder in whose name the aircraft is registered
 - is an individual and has died, and an executor has been appointed, a certified true copy of the letter of executorship issued in terms of the Administration of Estates Act, 1965 (Act 66 of 1965);
 - (ii) is an individual and the estate of such holder is sequestrated and a trustee has been appointed, a certified true copy of the certificate of appointment issued in terms of the Insolvency Act, 1936 (Act 24 of 1936); or
 - (iii) is a company or a close corporation and such holder is liquidated and a liquidator has been appointed, a certified true copy of the certificate of appointment issued in terms of the Companies Act, 2008, or the Close Corporations Act, 1984, as the case may be; and
 - (e) the appropriate fee as prescribed in Part 187.
- (3) If a South African registered aircraft -

- (a) is destroyed, lost or stolen;
- (b) is damaged beyond repair and becomes permanently useless as an aircraft; or
- (c) is permanently withdrawn from use,

the holder of the certificate of registration concerned shall apply to the Director for the cancellation of such certificate of registration, and in addition, shall give provisional notice in writing to the Director within 30 days from the date on which such event occurred, of his, her or its intention to apply for such cancellation.

- (4) An application referred to in sub-regulation (3) shall be
 - (a) made in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the original of the last certificate of registration;
 - (ii) in the case of any amateur-built aircraft or production-built aircraft, the special flight permit issued in terms of Part 21;
 - (iii) in the case of an aircraft other than an amateur-built aircraft or production-built aircraft, the certificate of airworthiness issued in terms of Part 21;
 - (iv) the airframe data plate of the aircraft;
 - (v) if the holder in whose name the aircraft is registered
 - (aa) is an individual and has died, and an executor has been appointed, a certified true copy of the letter of executorship issued in terms of the Administration of Estates Act. 1965:
 - (bb) is an individual and the estate of such holder is sequestrated and a trustee has been appointed, a certified true copy of the certificate of appointment issued in terms of the Insolvency Act, 1936; or
 - (cc) is a company or close corporation and such holder is liquidated and a liquidator has been appointed, a certified true copy of the certificate of appointment issued in terms of the Companies Act, or the Close Corporations Act, 1984, as the case may be.

Cancellation of registration

- **47.00.12** (1) An aircraft shall remain registered on the register until the registration of such aircraft is cancelled.
- (2) The Director shall cancel the registration of an aircraft, amend the register and issue a certificate of cancellation in the prescribed form if the Director is satisfied of the occurrence of any of the events referred to in regulation 47.00.11(1) and (3).
- (3) The Director may cancel the registration of an aircraft, amend the register and issue a certificate of cancellation if—
 - (a) the holder of a certificate of registration has not submitted the maintenance records of the aircraft for a period of three months;
 - (b) the holder of a certificate of registration has not paid the currency fees for a period of three months:

- (c) the aircraft was erroneously placed in the register; or
- (d) the holder of a certificate of registration has not complied with the duties of the holder of the certificate prescribed in regulation 47.00.7(d)(i).

Duration of certificate of registration

- 47.00.13 (1) A certificate of registration shall remain in force until
 - (a) it has been invalidated in terms of regulation 47.00.10(4); or
 - (b) the registration of the aircraft is cancelled by the Director.
- (2) The holder of a certificate of registration which has become invalid in terms of this Part, shall surrender such certificate to the Director within thirty (30) days from the date on which the certificate became invalid.

South African Civil Aircraft Register

- **47.00.14** (1) The Director shall maintain a register of South African aircraft, which shall be called "South African Civil Aircraft Register".
- (2) The register shall contain the following particulars:
 - (a) The full name and, if any, the trade name of the holder of the certificate of registration;
 - (b) the postal address of the holder of the certificate of registration;
 - (c) the date on which the aircraft was registered for the first time;
 - (d) the date on which the aircraft was registered in the name of the holder;
 - (e) particulars of the manufacturer's designation, serial number and MCM of the aircraft;
 - (f) the nationality and registration marks of the aircraft; and
 - (g) the airworthiness category of the aircraft.
- (3) An excerpt of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who may request such an excerpt.

PART 48: LEASING OF AIRCRAFT

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SUBPART 1: GENERAL

Application

- **48.01.1** (1) This Part applies to all aircraft lease agreements involving South African air service operators, South African registered aircraft and foreign registered aircraft operated by South African air service operators.
- (2) The provisions of this Part apply with the necessary changes to any dry lease agreement whereby either the lessor or the lessee is a South African entity but not an air service operator.
- (3) The provisions of this Part apply with the necessary changes to any sub-lease agreement.

SUBPART 2: FINANCIAL OR CAPITAL LEASES

Filing of lease agreement

- **48.02.1** (1) Any South African operator, who enters into a financial or capital lease agreement as lessee in respect of an aircraft, must
 - (a) provide the Director with a certified copy thereof; and

- (b) adhere to the provisions of the Convention on the International Recognition of Rights in Aircraft Act, 1993 (Act 59 of 1993), where applicable.
- (2) Any aircraft, acquired on a financial or capital lease, to be used for the provision of an air service, shall
 - (a) be deemed to be on a dry lease, and the provisions of regulation 48.03.1 shall apply with the necessary changes; and
 - (b) be put on the South African Civil Aircraft Register, if not already so registered, in accordance with the provisions of Part 47.

SUBPART 3: OPERATING LEASES

Dry lease-in

- **48.03.1** (1) (a) An operator who intends to dry lease-in an aircraft for the purpose of providing an air service therewith, shall submit an application to the Director in the appropriate prescribed form signed by both parties, together with the appropriate fee as prescribed in Part 187 for prior approval to dry lease-in the aircraft.
- (b) Where a dry lease involving a foreign operator is approved by the Director, a copy of the duly completed form, must be forwarded to the International Air Services Council or the Domestic Air Service Council, as applicable, for record keeping purposes.
- (2) The oversight responsibilities in respect of a dry lease-in of a foreign registered aircraft may be fully or partially transferred in terms of an Article 83*bis* Agreement from the appropriate authority of the State of Registry to the appropriate authority of the State of the Operator.
- (3) Subject to such conditions as he or she may determine, the Director may grant approval for the lease agreement if satisfied that
 - (a) the aircraft to be leased-in is type-certificated in accordance with the requirements prescribed in Part 21:
 - (b) the aircraft to be leased-in will be maintained in accordance with an approved maintenance schedule and current manufacturer's maintenance manual;
 - (c) the aircraft to be leased-in will be operated under the operating certificate held by the lessee and the applicant will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, 1993 or the Air Service Licensing Act, 1990;
 - (d) if a foreign-registered aircraft, -
 - (i) the transfer of responsibilities, as contemplated in sub-regulation (2), has been effected:
 - (ii) the appropriate authority of the State of Registry is in a position to carry out its oversight responsibilities effectively;
 - (iii) the duration of the dry lease-in is for a period not exceeding six consecutive calendar months in any 12-months period calculated from the commencement date of the lease; and

- (iv) the number of foreign registered aircraft leased by the operator referred to in subregulation (1) constitutes not more than half the number of aircraft listed on that operator's operating certificate.
- (4) When the conditions, contemplated in sub-regulation (3)(d), are not met, the aircraft to be dry leased-in must be registered in the Republic as prescribed in Part 47 of these Regulations, and
 - (a) the aircraft shall be subject to the airworthiness certification, maintenance, and inspection procedures prescribed by the Regulations in respect of South African registered aircraft;
 - (b) the responsibility or custody of the aircraft and control of all operations shall be vested in the lessee operator:
 - (c) the responsibility for the airworthiness and maintenance of the aircraft shall be vested in the lessee operator; and
 - (d) the registration of the aircraft shall be valid only for the duration of the lease agreement, and for as long as the aircraft is operated in accordance with the Regulations, the terms or conditions specified in the lessee operator's operating certificate, the related operations specifications, and the lessee operator's operations and maintenance control manuals.
- (5) The conditions of approval referred to in sub-regulation (3) must be made part of the lease agreement, and in particular must specify the responsibilities of the parties involved in respect of
 - (a) airworthiness of the aircraft and performance of maintenance;
 - (b) signing the maintenance release;
 - (c) flight and cabin crew member certification;
 - (d) crew member training, competency and currency;
 - (e) scheduling of crew members;
 - (f) dispatch or flight-following; and
 - (g) insurance arrangements.
- (6) A dry lease agreement between South African operators must include the arrangements concerning the party's respective responsibilities in respect of the airworthiness of the aircraft.

Dry lease-out

- **48.03.2** (1) An operator of a South African registered aircraft may dry lease-out the aircraft to any other South African operator (the lessee), subject to the provisions of sub-regulation (2).
- (2) The provisions referred to in sub-regulation (1), include confirmation in the lease agreement of the parties' respective responsibilities in respect of the continued airworthiness of the aircraft; and that the aircraft will be operated in terms of the operating certificate held by the lessee.
- (3) An operator (the lessor) of a South African registered aircraft may dry lease-out the aircraft to any other operator (the lessee) in a Contracting State.
- (4) Upon application by an operator (the lessor) of a South African registered aircraft in the appropriate prescribed form, the Director may remove the aircraft from the operating certificate held by such operator.

- (5) The removal, contemplated in sub-regulation (4), in respect of an aircraft to be dry leased-out to an operator in a Contracting State, shall be conditional on
 - (a) the appropriate authority of the State of the Operator to whom such aircraft is dry leased concluding an Article 83*bis* Agreement with the Minister whereby it has accepted responsibility for surveillance of the maintenance and operation of such aircraft in terms of the applicable requirements of Subpart 6; and
 - (b) such aircraft being maintained according to an approved maintenance schedule and current manufacturers maintenance manual.
- (6) When a South African registered aircraft is dry leased-out to an operator in a State that is not a Contracting State, the Minister may not transfer responsibility for surveillance of the maintenance and operation of the aircraft to the relevant authority of that State, and the lessor operator shall be liable for any costs incurred by the Authority in carrying out its oversight function in respect of such aircraft. The lessor operator shall be liable also for any such costs in respect of an aircraft for which no transfer of duties, as contemplated in sub-regulation (5)(a), has been agreed upon.
- (7) The provisions of sub-regulations (5) and (6) shall apply with the necessary changes in respect of a dry leased-out aircraft remaining on the operating certificate of the lessor.

Wet lease-in

- **48.03.3** (1) A South African operator who intends to wet lease-in an aircraft for the purpose of providing an air service therewith, must
 - (a) be the holder of an appropriate operating certificate applicable to the category and type of aircraft, as defined in the Air Services Licensing Act, 1990 (Act No. 115 of 1990) and the International Air Services Licensing Act, 1993 (Act No. 60 of 1993); and
 - (b) submit an application to the Director in the appropriate prescribed form, signed by both parties, together with the appropriate fee as prescribed in Part 187 for prior approval to wet lease-in the aircraft. Where the Director approves a wet lease-in involving a foreign operator, a copy of the duly completed form prescribed in Document SA-CATS 48 must be forwarded to the International Air Services Council or the Air Service Licensing Council, as applicable, for record keeping purposes.
- (2) The duration of the lease agreement concerned, in respect of foreign-registered aircraft, shall be limited to a maximum period of six consecutive calendar months in any 12-months period calculated from the date on which the Director approves the lease.
- (3) The approval referred to in sub-regulation (2) may, subject to such conditions as the Director may determine, be granted if such aircraft
 - (a) is wet leased-in from an operator (the lessor) who is the holder of an operating certificate or similar document issued by an appropriate authority;
 - (b) has been type-certificated by an appropriate authority;
 - (c) holds a valid certificate of airworthiness or similar document issued by an appropriate authority;

- (d) is maintained and operated in accordance with safety standards at least equivalent to the safety standards referred to in these Regulations in respect of aircraft operated in a commercial air transport operation; and
- (e) will be operated in terms of the operating certificate or similar document held by the lessor: Provided that, if the operator concerned is a foreign operator, the appropriate authority of the State of the Operator and the Minister may enter into an Article 83bis Agreement as provided for in Subpart 6 in terms of which it is agreed that the aircraft shall be operated in terms of the operating certificate of the South African lessee, and that certain specified oversight responsibilities be transferred from that authority to the Director.

(4) The lessee must -

- (a) satisfy the Director that the safety standards of the lessor are not less than the applicable safety standards referred to in these Regulations; and
- (b) ensure that any law applicable to the aircraft to be wet leased-in, and the maintenance or operation thereof, is complied with.
- (5) The total number of wet leased-in aircraft, either foreign or South African registered, may not constitute more than half the number of aircraft listed on the operating certificate of the operator referred to in sub-regulation (1) (the lessee).
- (6) The conditions of approval referred to in sub-regulation (1)(b) must be part of the lease agreement between the lessor and the lessee.
- (7) Should any agreement, contemplated in sub-regulation (3)(e), have been concluded, such agreement must be formally registered with the Council of ICAO and the appropriate authority of any third State affected must be notified.

Wet lease-out

- **48.03.4** (1)(a) The South African operator of a South African registered aircraft who intends to wet lease-out the aircraft to any non South African operator, where the non South African operator is licensed in a non contracting State, must remain the operator of the aircraft in terms of his or her operating certificate, and responsibility for surveillance of the maintenance and operation of such aircraft may not be transferred to the appropriate authority of the State of the Operator to which such aircraft is wet leased-out.
- (b) The provisions of regulation 48.03.2(6) in respect of the cost of oversight by the Authority shall apply with the necessary changes.
- (2) (a) Subject to the provisions of sub-regulation (3), the South African operator of a South African registered aircraft may wet lease-out the aircraft to any non South African operator in a Contracting State.
- (b) In such case, and upon application by such operator in the prescribed form, the Director may remove the aircraft from the operating certificate held by such South African operator: Provided that –

- (i) the appropriate authority of the State of the Operator to whom such aircraft is wet leased has accepted, in writing, responsibility for surveillance of the maintenance and operation of such aircraft, as provided for in Article 83*bis* of the Convention; and
- (ii) such aircraft is maintained according to an approved maintenance schedule.
- (3) (a) A non South African licensed lessee operator may only use awet leased-out South African registered aircraft, in commercial air transport operations to and from the Republic if the lessee has the underlying traffic rights to enter South Africa.
- (b) The South African registered wet leased aircraft does not need to be listed on the Foreign Operator's Permit of the lessee.
- (4) (a) A South African operator, intending to wet lease-out an aircraft to another South African operator must submit an application to the Director in the appropriate prescribed form as , signed by both parties, together with the appropriate fee as prescribed in Part 187 for prior approval to wet lease out the aircraft.
- (b) Where the Director approves a wet lease-out of an aircraft to another South African operator, a copy of the duly completed form must be forwarded to the Air Services Licensing Council or the International Air Services Council, as applicable, for record keeping purposes.
- (5) Any conditions prescribed in granting such approval must be incorporated by the operators into the lease agreement.
- (6) Notwithstanding the provisions of sub-regulations (4) and (5), the Director may provide any South African operator with a list of South African operators from whom aircraft may be wet leased-in by such operator without prior approval.
- (7) A South African operator, who agrees to wet lease-out an aircraft to another South African operator, must remain the operator of the aircraft and must retain the functions and responsibilities prescribed in his, her or its operating certificate.
- (8) Notwithstanding the provisions of sub-regulation (5), the lessee operator, who in terms of the Air Services Licensing Act, 1990, or International Air Services Act 1993 (as the case may be) is required to be actively and effectively in control of the air service, must ensure that the lessor operator adheres to the conditions of the latter's operating certificate and its operating specifications, which conditions may not be in conflict or less than the conditions of the lessee operator's operating certificate.
- (9) The terms of an approved wet lease agreement between South African operators must include
 - (a) the arrangement concerning the operating certificate under which the flights with the leased aircraft shall be operated; and
 - (b) any deviation from the operating certificate under which the flights with the leased aircraft shall be operated.

Damp lease

- **48.03.5** (1) When an aircraft is damp leased with only a partial crew (whether flight or cabin crew) the provisions of regulations 48.03.3 and 48.03.4 applies with the necessary changes in respect of the crew provided as part of the lease, while regulations 48.03.1 and 48.03.2 applies with the necessary changes in respect of the aircraft provided by the lessee.
- (2) The cabin or flight crew members provided by the lessee for the operation must undergo the Standard Operating Procedures (SOP) training of the lessor prior to the commencement of any commercial air transport operation.

SUBPART 4: SUB-CHARTERS

Sub-charters

- **48.04.1** (1) In exceptional circumstances, as contemplated in Document SA-CATS 48, an operator may sub-charter an aircraft with or without flight crew: Provided that
 - (a) the sub-charter period does not exceed five consecutive days; and
 - (b) the sub-charterer informs the Director, within 24 hours, of such sub-charter.
- (2) In the case of Part 121 operations, the provisions of sub-regulation (1) apply only to wet lease operations.

SUBPART 5: INSURANCE

Insurance

48.05.1 Any reference to insurance in this Part means a reference to the prescribed compulsory insurance in terms of the Air Services Licensing Act, 1990, the International Air Services Act, 1993 and the Civil Aviation Act, 2009.

SUBPART 6: TRANSFERS OF RESPONSIBILITIES BETWEEN STATES

Article 83bis agreement

- **48.06.1** (1) The Minister, being duly authorised, may in the case of dry or wet leased aircraft in accordance with the requirements contained in this Subpart enter into an Article 83*bis* Agreement for the transfer of certain or all the functions and duties of the State of Registry of an aircraft to the State of Operator, where such functions and duties can more adequately be discharged by the State of the Operator and thereafter register such agreement with the Council of ICAO.
- (2) The functions and duties, referred to in sub-regulation (1)(a) are the functions and duties allocated by the Convention to the State of Registry in respect of –

- (a) Article 12 of the Convention: "Rules of the Air", including the prosecution of all persons violating the rules and regulations relating to the flight and manoeuvre of aircraft in force in a particular Contracting State:
- (b) Article 30 of the Convention: "Aircraft radio equipment", including the installation and operation of radio transmitting apparatus in aircraft operated in the air space of a Contracting State;
- (c) Article 31 of the Convention: "Certificates of Airworthiness", the issuing or rendering valid thereof by the State of Registry; and
- (d) Article 32 of the Convention: "Licences of Personnel", the issuing or rendering valid thereof by the State of Registry.
- (3) The transfer of any function or duty, contemplated in sub-regulation (1)(a) shall not have effect in respect of any other Contracting State before either
 - (a) the Article 83*bis* Agreement between the States in which it is embodied has been registered with the ICAO Council and made public pursuant to Article 83; or
 - (b) the existence and scope of the Article 83*bis* Agreement have been directly communicated to the appropriate authorities of the other Contracting State or States concerned by a State party to the agreement.
- (4) Similarly as provided for in sub-regulation (1), the Minister may accept certain or all of the functions and duties of the appropriate authority of a State of Registry in respect of an aircraft on that State's aircraft register and, to the extent provided for in terms of the relevant Article 83bis Agreement, deem such aircraft to be a South African aircraft for the purpose of these regulations.

Personnel licensing

- **48.06.2** (1) A South African air services operator who dry leases-in a foreign aircraft must satisfy the Director that
 - (a) the flight and cabin crew to be designated for duty on the aircraft already possess valid licences or approvals issued by the State of Registry, or that arrangements have been made for such personnel to obtain the necessary licences or approvals; and
 - (b) all the regulations of the State of Registry in respect of personnel licensing and the allocation, training and checking of flight and cabin crew are adhered to.
- (2) If there is reasonable belief that the lessee operator is not complying with the appropriate regulations of the State of Registry, contemplated in sub-regulation (1)(b), the appropriate authority of that State must be advised and a request made that the matter be investigated.
- (3) In terms of an Article 83*bis* Agreement as contemplated in regulation 48.06.01, the Republic of South Africa may take responsibility for oversight of the matters contemplated in subregulation (1)(b).
- (4) The Director may, on conditions prescribed by him or her, issue validations to the lessee operator's flight and cabin crew members, designated for duty in respect of a South African aircraft, dry leased-out to a foreign operator,
- (5) The validation, contemplated in sub-regulation (4), may be issued in the format prescribed in Document SA-CAT 48.

Airworthiness

- **48.06.3** (1) A South African air services operator who dry leases-in a foreign aircraft must satisfy the Director that
 - (a) the AMO, responsible for the continued airworthiness of the aircraft, already possesses valid licences or approvals issued by the State of Registry, or that arrangements have been made for such organisation to obtain the necessary licences or approvals; and
 - (b) the organisation, contemplated in paragraph (a), must carry out its maintenance functions in accordance with all the applicable regulations of the State of Registry.
- (2) In the case of a reasonable belief that the lessee operator is not complying with the applicable regulations of the State of Registry, the appropriate authority of that State must be advised and a request made that the matter be investigated.
- (3) In terms of an agreement as contemplated in regulation 48.06.01, the Minister may take responsibility for oversight of the matters contemplated in sub-regulation (1)(b).
- (4) In respect of an aircraft, dry leased-out to a foreign operator, the Director may, on conditions prescribed by him or her, approve a foreign-based AMO to carry out all or part of the maintenance on the aircraft in accordance with the aircraft's approved maintenance schedule and remove the aircraft from the South African Civil Aircraft Register for the duration of the dry lease-out, facilitating its registration in the State of the Operator.

Recognition

- **48.06.4** (1) The Director shall recognise an Article 83*bis* Agreement between two Contracting States that have ratified Article 83*bis* whereby the State of the Operator is substituted for the State of Registry, within the limits established by the transfer arrangements, provided that
 - (a) the Article 83bis Agreement has been duly registered with ICAO; or
 - (b) the affected third-party States have been informed directly by at least one of the States party to the Article 83*bis* Agreement.
- (2) The Director is not be obliged to recognise the transfer of functions and duties between States that are not parties to Article 83*bis* or States that are parties to it, but which have not registered the Article 83*bis* Agreement with ICAO or where South Africa has not been informed directly by at least one of the States party to the Article 83*bis* Agreement, of the transfer.
- (3) The Director shall recognize the validity of licences and certificate where Contracting States, that have ratified Article 83 *bis*, have transferred the authority to render valid or to renew crew licences, radio licences and certificates of airworthiness pursuant to Article 83 *bis* from the State of Registry to the State of the Operator, if he or she has been officially informed of such transfer, provided that these licences and certificates have been issued, rendered valid or renewed by the appropriate authority of the State of the Operator fully meeting the requirements of Annexes 1 and 8 to the Convention.

Transfer of responsibilities

- **48.06.5** (1) The Article 83*bis* Agreement must specifically mention the functions and duties to be transferred and those functions not mentioned will be deemed to remain with the State of Registry. A listing of responsibilities regarding airworthiness that may or may not be transferred between States is contained in Document SA-CATS 48.
- (2) Where an Article 83*bis* Agreement has been concluded, the State of Registry shall be relieved of responsibility and, where applicable, of liability in respect of the functions and duties duly transferred to the Authority, and the latter must apply these regulations.
- (3) The Department of Transport must ensure that prescribed information concerning the existence of an Article 83*bis* Agreement relating to aircraft operating to or from the Republic's territory is promptly relayed to any South African authority involved in inspection.
- (4) For the purpose of identifying individual States' responsibility for safety oversight on the occasion of any verification process, such as ramp inspections, a certified true copy of the Article 83*bis* Agreement and of the operating certificate under which the aircraft is operated and in which it is listed must be carried on board the aircraft at all times while the Article 83*bis* Agreement is in force.
- (5) Document SA-CATS 48 contains examples of suitable Article 83bis Agreements.

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SUBPART 1: GENERAL

Applicability

61.01.1 This Part applies to the issuing, revalidating and re-issuing of South African pilot licences and ratings, designation of examiners, validation and conversion of foreign pilot licences and ratings, approval of FSTDs, and matters related thereto.

Pilot licences

- **61.01.2** (1) No person may act as a pilot of a South African registered aircraft, except in the case of dual instruction with an appropriately rated flight instructor, unless such person holds a valid pilot licence with applicable ratings issued, re-issued, validated or revalidated by the Director or by an appropriate authority in terms of this Part or Part 62: Provided that a SPL may have been issued without a class rating or type rating.
- (2) The following pilot licences may be issued in terms of this Part
 - (a) SPL;
 - (b) PPL (Aeroplane);
 - (c) PPL (Helicopter);
 - (d) CPL (Aeroplane);
 - (e) CPL (Helicopter);
 - (f) ATPL (Aeroplane); and
 - (g) ATPL (Helicopter).

Ratings for pilots

61.01.3 (1) The ratings for pilots are as follows –

- (a) category ratings -
 - (i) aeroplane;
 - (ii) helicopter;
- (b) class ratings
 - (i) all single-engine piston aeroplanes (land);
 - (ii) all single-engine piston aeroplanes (sea);
 - (iii) all touring gliders;
 - (iv) each manufacturer of single-engine turbo-prop aeroplanes (land);
 - (v) each manufacturer of single-engine turbo-prop aeroplanes (sea);
 - (vi) all multi-engine piston aeroplanes (land);
 - (vii) all multi-engine piston aeroplanes (sea);
- (c) type ratings
 - (i) aeroplane with a MCM exceeding 5 700 kilogram;
 - (ii) multi-engine turboprop aeroplane;
 - (iii) aeroplane certificated for operation with a flight crew of at least two pilots;
 - (iv) aeroplane with unconventional handling characteristics that requires additional flying or FSTD training;
 - (v) warbird;
- (d) ratings for special purposes
 - (i) night rating;
 - (ii) instrument rating;
 - (iii) flight instructor rating;
 - (iv) post-maintenance test flight rating;
 - (v) test pilot rating
 - (vi) tug pilot rating;
 - (vii) helicopter sling load rating;
 - (viii) helicopter winching rating;
 - (ix) helicopter game or livestock cull rating;
 - (x) agricultural pilot rating;
 - (xi) aerobatics rating; and
 - (xii) tow rating.
- (2) The class ratings for aeroplanes must be in accordance with the list as described in Document SA-CATS 61.9.
- (3) The type ratings for helicopters issued in terms of this Part comprise a type rating by name for each type of helicopter.
- (4) In order to act as a flight crew member of another variant of the aircraft within a particular class rating, differences or familiarisation training may be required as prescribed in regulation 61.09.7(2).

- (5) The holder of a licence issued in terms of Part 61 shall not be required to be issued with a national pilot licence in terms of Part 62 for the purpose of flying conventionally controlled microlight aeroplanes and light sport aeroplanes: Provided that he or she
 - (a) undergoes differences or familiarisation training; and
 - (b) complies with the relevant requirements in Part 62 the type by name or class rating, as the case may be, of the aeroplanes endorsed into his or her logbook by a suitably rated instructor.

Flight instructor and test flight ratings

- **61.01.4** (1) The flight instructor ratings comprise of
 - (a) Grade I aeroplane flight instructor rating;
 - (b) Grade II aeroplane flight instructor rating;
 - (c) Grade III aeroplane flight instructor rating;
 - (d) Grade I helicopter flight instructor rating;
 - (e) Grade II helicopter flight instructor rating;
 - (f) Grade III helicopter flight instructor rating.
- (2) Test flight ratings comprise of
 - (a) Class I test pilot rating;
 - (b) Class II test pilot rating; and
 - (c) post-maintenance test flight rating.

Maintenance of competency and skills tests

- **61.01.5** (1) Unless the holder of a pilot licence or rating maintains competency and recency by complying with the appropriate requirements prescribed in this Part or Part 62 and Part 91, as the case may be, the licence holder shall not exercise the privileges granted by the licence.
- (2)(a) The holder of a pilot licence shall not exercise the privileges of that licence unless he or she has successfully passed an initial licence skills test or a revalidation check in the same category of aircraft.
- (b) The revalidation check for an instrument rating shall revalidate the maintenance of competency of a pilot licence of the holder of an instrument rating in the same category of aircraft for a period of 12 months.
- (c) Notwithstanding paragraphs (a) and (b) above, a licence holder who complies with subregulation 61.11.7(3), may exercise the privileges of the licences in both the aeroplane and helicopter categories.
- (3) A skills test for a night rating or initial instrument flight rating conducted after the first revalidation check of the holder of a PPL will revalidate the maintenance of competency in the same category of aircraft.

- (4) The revalidation check shall be conducted by a DFE except that in the case of the holder of a PPL (Aeroplane or Helicopter) the revalidation check may be conducted by an appropriately rated Grade I or Grade II flight instructor.
- (5)(a) The contents of the revalidation check referred to in sub-regulation (2) are defined in Document SA-CATS 61.
- (b) The test shall be conducted in an aircraft or in an approved FSTD of the aircraft category for which the revalidation is sought.
- (6) The person who conducted the skills test shall enter the outcome in the pilot's logbook and sign it accordingly. The following rules shall apply
 - (a) The original application and skills test forms shall be submitted to the Director within 30 days of the skills test or revalidation check for the purposes of verification and record keeping, failing which a written motivation by the applicant will be required before consideration of the application.
 - (b) In the case of an unsuccessful skills test or revalidation check, the pilot must undergo remedial training with a flight instructor, other than the person who conducted such skills test or revalidation check, before submitting him or herself for a recheck: Provided that no recheck may be conducted within 72 hours of an unsuccessful skills test.
 - (c) No recheck may be conducted without a letter of recommendation by the flight instructor referred to in paragraph (b).
 - (c) In the event of circumstances interrupting a skill or revalidation test, then a Notice of Discontinuance shall be issued. This notice will allow an applicant to complete those aspects of the test not yet assessed within a period of 30 days. The notice shall accompany the relevant skills test report and application. Failure to continue the test within this period shall result in the entire test being repeated.
 - (d) If the skills test or revalidation check is conducted within 90 days prior to the expiry date of competency, then the new expiry date will be calculated from the date of expiry.
 - (e) If the skills test or revalidation or proficiency check is conducted more than 90 days prior to the expiry date of competency, then the new expiry date will be calculated from the last day of the month in which the test or check was conducted.
 - (f) No flight test shall be conducted before successful completion of any applicable theoretical or oral examination.
 - (g) The navigation element of the skills test for the issuing of a PPL or a CPL may be conducted as a separate flight within a maximum period of 14 days.

- (h) In order to provide for exceptional circumstances, an extension of up to a maximum of 30 days from the date of expiry of the maintenance of competency of any licence or the validity of any rating may be granted upon submission of a written application to the Director.
- (7) The pilot concerned must countersign and receive a copy of the test report referred to in sub-regulation (7).
- (8) If a pilot fails to demonstrate the required standard during the proficiency check the following rules shall apply
 - (a) The person who conducted the revalidation check must inform him or her that he or she may not exercise the privileges of that particular licence.
 - (b) In the case of an unsuccessful skills test or revalidation check, the pilot must undergo remedial training with a flight instructor, other than the person who conducted such skills test or revalidation check, before submitting him or herself for a recheck; provided that no recheck may be conducted within 72 hours of an unsuccessful skills test.
 - (c) No recheck may be conducted without a letter of recommendation by the flight instructor referred to in paragraph (b).
- (9) The holder of a pilot licence must submit to the Director, at least annually, a certified copy of the summary of his or her logbook in the format prescribed in Document SA-CATS 61 together with the prescribed licence currency fees.
- (10) If the Director has reasonable suspicion that a person, licensed in terms of this Part, has failed to maintain the minimum standard required to exercise the privileges of any licence or rating which he or she holds, the Director may give the licensee reasonable notice in writing to undergo, by a date specified by the Director, the skills test or all or some of the theoretical knowledge examinations prescribed in this Part in respect of such licence or rating.
- (11) Should the tests or examinations, referred in sub-regulation (10), show that the standard of the licence or rating holder is below that required for the licence or rating concerned, the Director must suspend the holder from exercising all or any of the privileges of that licence or rating until such time as the holder can show that he or she is again able to meet the skill or theoretical knowledge requirements for that licence or rating.
- (12) If the person referred to in sub-regulation (11) fails without reasonable cause to undergo the test or examination as ordered by the Director, his or her standard shall be deemed to be below that required for the licence or rating concerned and the provisions of sub-regulation (11) shall with the necessary changes apply.

Medical requirements and fitness

- **61.01**.6 (1) An applicant for a pilot licence in terms of this Part must hold an appropriate valid medical certificate issued in terms of Part 67 of these Regulations.
- (2) The holder of a pilot licence issued in terms of this Part may not exercise the privileges of that licence
 - (a) unless that person holds an appropriate valid medical certificate issued in terms of Part 67 and complies with all medical endorsements on that medical certificate;
 - (b) while he or she is aware of having a medical deficiency that would make him or her unable to meet the medical standards for his or her medical certificate, until he or she has been assessed and declared medically fit again by an aviation medical examiner designated in terms of Part 67; or
 - (c) when he or she is unable to act as a flight crew member of an aircraft because of the circumstances prescribed in regulations 91.02.3 (1) and (2).
- (3) If reasonable suspicion exists that a licence holder has contravened the provisions of paragraph (a) of regulation 91.02.3(1) and paragraphs (a), (b) and (c) of regulation 91.02.3(2), the authorised officer, inspector or authorised person may order the licence holder to undergo appropriate medical tests.
- (4) Should the licence holder refuse to submit to the test referred to in sub-regulation (3), the authorised officer, inspector or authorised person must suspend the licence with immediate effect.
- (5) The holder of a pilot licence issued in terms of this Part must carry the medical certificate, referred to in paragraph (a) of sub-regulation (2), at all times when exercising the privileges of such licence, and must produce such certificate on demand by the Director, an authorised officer, inspector or authorised person.
- (6) In the event that the aviation medical examiner is unable to submit an electronic data to the Director, the licence holder must submit a copy of the medical certificate to the Authority within 90 days.

Language

61.01.7 With the exception of a student pilots licence, no person may be issued with a pilot licence under this Part unless he or she has demonstrated or provided proof of the ability to speak the English language as set out in Document SA-CATS 61.

Logging of flight time

61.01.8 (1) The holder of a pilot licence must maintain in a pilot logbook a record of all his or her flight time, instrument time, FSTD time and instruction time. Where electronic logbooks are used, the electronic data must be printed on paper at least every 90 days and the printed pages filed sequentially in a binder.

- (2) The form of and information to be contained in the logbook, referred to in sub-regulation (1), and the manner in which such logbook must be maintained are as prescribed in Appendix A to Document SA-CATS 61.
- (3) Entries in pilot logbooks must be made within the following periods after the completion of the flight to be recorded
 - (a) seven days in the case of flights not for hire and reward (Part 91 operations), flight training, and domestic commercial air transport operations;
 - (b) 14 days in the case of international commercial air transport operations;
 - (c) 48 hours after return to base in the case where a pilot is engaged in flight operations away from the base where the pilot logbook is normally kept.
- (4) All pilots must retain their pilot logbooks for at least 60 months calculated from the date they no longer hold a valid pilot licence.
- (5) If the holder of a pilot licence carries out a number of flights upon the same day and the interval between successive flights does not exceed one hundred and eighty minutes, such series of flights may be recorded as a single entry, provided that in the case of a cross-country flight the route and intermediate stops must be recorded.
- (6) The holder of a pilot licence must make the logbook available for inspection upon a reasonable request by the Director, an authorised officer, inspector or authorised person.

Pilot-in-command time

- (7) The holder of a valid pilot licence must log as PIC time only that flight time during which he or she is
 - (a) the designated PIC of the aircraft; this shall be the case also if the designated PIC provides command supervision to another pilot in terms of paragraph (b) below;
 - (b) PICUS, provided there is no intervention by the supervising PIC and "PICUS" is indicated in the remarks column with the entry certified by the supervising PIC. PICUS may, irrespective of the licence held, be flown from either the left hand or the right hand seat, provided that the pilot is appropriately rated and the aircraft is either certificated for multi-pilot operations or required to be operated by two pilots in terms of Parts 91, 94, 96, 121, 127, 135 or 138.
 - (c) carrying out a student solo flight and is the sole occupant of the aircraft (except in the case of an airship requiring an additional crew member) and "SOLO" is indicated in the remarks column:
 - (d) giving flight instruction while occupying a pilot seat with access to the controls, provided that the time must also be logged as instructor time;
 - (e) student pilot-in-command (SPIC) when acting as PIC under the supervision of an appropriately rated flight instructor during flight training on an approved course of CPL or CPL/IR training and for a successful CPL or IR initial flight test. To act as SPIC the student must be rated on the aircraft. SPIC time shall be credited as PIC time unless the Flight Instructor had reason to influence or control any part of the flight. A ground debriefing by the Flight Instructor does not affect the crediting as

PIC. SPIC time will be logged in the PIC column with 'SPIC' indicated in the remarks' column and certified by the supervising Flight Instructor.

Co-pilot time

(8) Any appropriately rated pilot occupying a pilot seat as co-pilot of an aircraft requiring more than one pilot under the type certification of the aircraft, or as prescribed by the regulations under which the flight is conducted, must log the flight time as co-pilot.

Safety pilot time

(9) Any pilot acting as safety pilot in terms of regulation 91.07.32, occupying a pilot seat, with an appropriate valid category, class or type rating, may log the flight as co-pilot. The flight time so acquired may not be credited towards the experience requirements for a higher grade pilot licence or a rating. The remarks column must be marked "SAFETY PILOT".

Dual flight instruction time

(10) Flight time during which the holder of a pilot licence is receiving dual instruction must be logged as dual flight time, and must include a record of the air exercises undertaken.

Instrument flight time

- (11) The pilot controlling an aircraft under actual or simulated IMC solely by reference to instruments and without external reference points must log that time as instrument flight time.
- (12) An instructor conducting instrument flight training or an examiner conducting a skill or proficiency instrument test must log as instrument flight time all flight time in actual (not simulated) IMC.

Flight time as designated flight examiner

- (13) When acting as flight examiner and occupying a pilot seat, whether as the designated PIC or not, and provided the examiner holds the appropriate valid class or type rating, the flight time may be logged as PIC time and furthermore, as flight instructor time, in the capacity of examiner, if the examiner holds the appropriate valid flight instructor rating.
- (14) When a flight examiner administers a skills test or proficiency check from a seat, other than a pilot seat, he or she may log the flight time as co-pilot time, provided he or she holds the appropriate valid rating for the particular aircraft, but may not log the time as flight instructor time.
- (15) Flight time accumulated as a DFE must be marked in the remarks column of the pilot's logbook as DFE time.
- (16) Flight time accumulated as Official Flight Examiner (OFE) or Authorised Officer/Person (AO) must be marked in the remarks column of the pilot's logbook as OFE or AO.

Flight simulation time

- (17) All time accumulated during training on a FSTD approved for instrument flight training must be logged as instrument time, but must be clearly recorded as flight simulation time and must be certified by the instructor in the pilot's logbook.
- (18) Instructors and examiners must keep a record of all instruction and examiner time carried out on an approved FSTD and log the time as FSTD time, provided that they are rated on the simulated aircraft type, and are holders of an FSTD instructor authorisation issued in terms of this Part.

Crediting of flight time and theoretical knowledge

- **61.01.9** (1) The Director may only accept, for crediting purposes, flight time entered in a pilot logbook that has been lost or destroyed, if substantiated by means acceptable to the Director.
- (2) A person acting as pilot of an aircraft while not complying with any requirement of this Part applicable to that person may not credit that flight time for any purpose.
- (3) A student pilot may be credited in full with all solo and dual instruction flight time towards the total flight time requirement for the initial issue of a pilot licence.
- (4) A student, attending the integrated course referred to in regulation 61.01.15 (2), may be credited with PIC instrument time when flying under supervision, provided that the entries have been certified by the instructor in the remarks column of the pilot's logbook. Of these hours a maximum of 50 hours may be credited towards the PIC time required for the issue of a Commercial or ATPL (Aeroplane or Helicopter, as applicable).
- (5) The holder of a valid PPL may be credited in full with all solo, dual flight instruction and PIC flight time towards the total flight time experience required for the issue of a rating or the CPL in the same aircraft category.
- (6) The holder of a CPL may be credited with the total flight time during which he or she acted as the designated PIC towards the total PIC flight time experience required for a rating or the ATPL in the same aircraft category.
- (7) The holder of a Private Pilot or higher Licence, with an appropriate rating, may be credited
 - in full with the flight time towards the total flight time required for a higher grade pilot licence when acting as co-pilot at a pilot station of an aircraft certified to be operated with a co-pilot;
 - (b) with not more than 50 percent of the co-pilot flight time towards the total time required for a higher grade pilot licence when acting as co-pilot at a pilot station of an aircraft certified for operation by a single pilot but required by Parts 121, 127 or 135 to be operated with a co-pilot.

- (8) The holder of a CPL, who has completed a multi crew co-operation course (MCC), when acting as co-pilot performing under the supervision of the PIC the functions and duties of a PIC, may be credited to a maximum of 500 hours with such flight time towards the PIC flight time experience required for the ATPL in the same aircraft category, provided that the supervision is in accordance with a programme approved by the Director and such PIC time under supervision has been countersigned by the PIC.
- (9) (a) The holder of a recreational pilot licence who wishes to obtain a PPL must comply with the requirements as stipulated in regulations 61.03.1(1) to (3) and technical standard 61.02.5 of Document SA-CATS 61.
- (b) The holder of a helicopter pilot licence, or an equivalent pilot licence in the weight-shift controlled microlight aeroplane, gyroplane or glider category who wishes to obtain a PPL (Aeroplane) may be credited with up to a maximum of 10 hours. The additional 35 hours required must be addressed in a PPL training course which includes
 - (i) a minimum of 20 hours dual instruction in an aeroplane, which must include 5 hours instrument instruction time; and
 - (ii) a minimum of 15 hours solo flying time, which must include 5 hours cross country flying time and one triangular cross-country flight of at least 150 NM, on which at least one point must not be less than 50 NM from base, including full-stop landings at two different aerodromes away from base: Provided that at least one of the aerodromes from which the aircraft takes off for this flight shall be an aerodrome at which an air traffic services unit is in operation and for which a flight plan shall have been submitted.
- (c) The holder of a recreational pilot licence endorsed with the conventionally controlled microlight aeroplane category who wishes to obtain a PPL (Aeroplane) may be credited with up to a maximum of 25 hours. The additional 20 hours required must be addressed in a PPL training course which includes
 - (i) a minimum of 10 hours dual instruction in an aeroplane which must include 5 hours instrument instruction time; and
 - (ii) a minimum of 10 hours solo flying time, which must include 5 hours cross country flying time and one triangular cross-country flight of at least 150 NM, on which at least one point must be not less than 50 NM from base, including full-stop landings at two different aerodromes away from base: Provided that at least one of the aerodromes from which the aircraft takes off for this flight shall be an aerodrome at which an air traffic services unit is in operation and for which a flight plan shall have been submitted.
- (d) The holder of a recreational pilot licence endorsed with the light sport aeroplane category who wishes to obtain a PPL (Aeroplane) may be credited with a maximum of 30 hours. The additional 15 hours required must be addressed in a PPL training course which includes
 - (i) a minimum of 10 hours dual instruction in an aeroplane, which must include 5 hours instrument instruction time; and
 - (ii) a minimum of 5 hours solo flying time, which must include one triangular crosscountry flight of at least 150 NM, on which at least one point must be not less than

- 50 NM from base, including full-stop landings at two different aerodromes away from base: Provided that, at least one of the aerodromes from which the aircraft takes off for this flight shall be an aerodrome at which an air traffic services unit is in operation and for which a flight plan shall have been submitted.
- (10) An applicant for the issue or revalidation of a CPL (Aeroplane) or ATPL (Aeroplane) or flight instructor rating must have acquired the appropriate flight time required by these Regulations in aeroplanes, except when he or she is the holder of a valid helicopter pilot licence, where, in any such case, he or she must have acquired fifty percent of the required flight time in aeroplanes and the remaining fifty percent may have been acquired in helicopters in the ratio of 2 helicopter hours equals 1 aeroplane hour.
- (11) An applicant for the issue or revalidation of a CPL (Helicopter) or an ATPL (Helicopter) or flight instructor rating must have acquired the appropriate flight time required by these Regulations on helicopters, except when he or she is the holder of a valid aeroplane pilot licence where, in any such case, he or she must have acquired fifty percent of the required flight time in helicopters and the remaining fifty percent may have been acquired in aeroplanes in the ratio of 2 aeroplane hours equals 1 helicopter hour.
- (12) A pilot manipulating the flight controls of an aircraft under actual or simulated instrument flight conditions solely by reference to instruments and without external reference points may be credited with the instrument flight time thus acquired toward the total instrument flight time experience required for a higher grade pilot licence, an instrument rating and for keeping an instrument rating current.
- (13) Dual instruction time must be counted in full towards the total flight time experience required for a higher-grade pilot licence.
- (14) Time acquired as a pilot on a FSTD approved for the purpose, while under the supervision of an appropriately qualified instructor, may be credited towards
 - (a) required flight time experience for the issue of a pilot licence or rating, but only to the extent specified in each case in these Regulations;
 - (b) the instrument flight time experience required in terms of this Part and of Parts 91, 121, 127 or 135 for keeping the instrument rating current; and
 - (c) the revalidation of the instrument rating.
- (15) A pilot-in command, when supervising a pilot manipulating the flight controls of an aircraft under actual (but not simulated) instrument flight conditions, may be credited with the instrument flight time thus acquired towards the total instrument flight experience required as recent experience to maintain the currency of his or her instrument rating.
- (16) A flight examiner may be credited towards the experience requirements for a rating or higher pilot licence with all flight time accrued while carrying out skill testing or proficiency checking and logged in terms of regulation 61.01.08 as —

- (a) PIC time by an examiner who holds the appropriate valid class rating and, where applicable, type rating for the particular aircraft (whether the examiner was the designated PIC or not);
- (b) flight instructor time, in the capacity of flight examiner, by an examiner who holds the appropriate valid flight instructor rating; or
- (c) instrument flight time for the time the flight was conducted under IMC, by an examiner who holds a valid instrument rating.
- (17) The provisions of sub-regulation (16) apply only when the flight examiner was occupying a pilot seat.
- (18) For the purposes of calculating flight and duty times, as regulated by Parts 91, 121, 127 and 135 of these Regulations, any flight time accrued as flight examiner is deemed to be 'other flying', whether the examiner occupied a prescribed pilot seat or not.
- (19) A flight instructor may be credited with all instruction time acquired when giving flight instruction for the initial issue or revalidation of any licence or rating or when conducting differences or familiarisation training.
- (20) Instruction time acquired in line flying under supervision may only be recognised and logged as such if the Part 121, Part 127 or Part 135 operator has an approved scheme for line flying under supervision. A flight instructor may be credited with not more than three hours instruction time per sector so acquired towards a higher-grade flight instructor rating except in the cases of a flight exceeding 9 hours, whereby a maximum of one third of that flight time shall be recognised.
- (21) A flight instructor may be credited with
 - (a) 25% of the instruction time acquired as a FSTD instructor towards the revalidation of a flight instructor rating and towards a higher grade instructor rating. Instruction time so credited may not exceed 100 hours in the case of an upgrade to Grade II flight instructor, or 500 hours in the case of an upgrade to a Grade I flight instructor.
 - (b) 100% of the instruction time acquired in an approved simulator that is a full size replica of a specific type or make, model and series of aeroplane or helicopter flight deck and provided that the instructor is rated on the simulated aircraft type. Instruction time so credited may not exceed 100 hours in the case of an upgrade to Grade II flight instructor, or 1 000 hours in the case of an upgrade to a Grade I flight instructor.
- (22) The holder of a FSTD authorisation, issued in terms of this Part, may be credited for all the instruction time given on an approved flight simulation-training device towards the maintenance of competency prescribed for such authorisation.

- (23) A South African Air Force pilot or navigator may request the Director, in writing, for an exemption in terms of Part 11, to be fully or partially credited for theoretical knowledge requirements as detailed in Document SA-CATS 61 for individual licences or ratings issued in terms of Part 61. In the case of South African Air Force pilots, flight time shall be credited in full towards the issue of a South African civilian pilot licence and ratings specified in this Part as detailed in Document SA-CATS 61.
- (24) In the case of foreign military-trained pilots who can produce certified proof of flying hours logged, such flying time shall be credited in full towards the issue of a South African civilian pilot licence and ratings.
- (25) The holder of an instrument rating on aeroplanes is exempted from the theoretical knowledge training and examination requirements for an instrument rating on helicopters, and *vice versa*.
- (26) A student pilot having undergone all or part of the integrated course, referred to in regulation 61.01.15, who passed the theoretical knowledge examination for the CPL, shall be deemed to have passed the theoretical knowledge examinations prescribed for the issue of the PPL and a Part 96 authorisation issued in terms of Part 62 in the same category.
- (27) A student pilot having undergone all or part of the integrated course, referred to in regulation 61.01.16, who passed the theoretical knowledge examination for the ATPL, shall be deemed to have passed the theoretical knowledge examinations prescribed for the issue of the PPL and CPL, and for a Part 96 authorisation issued in terms of Part 62, in the same category.
- (28) (a) A commercial pilot, whilst acting as in-flight relief pilot (third pilot) and occupying a seat on the flight deck of an aircraft with a MCM of 116 600 kg or more and who is the holder of the appropriate type rating for that aircraft, may utilise 50 percent of the recorded flight time by day or night towards the total time for the requirement of 1500 hours for the issue of an ATPL.
- (b) A maximum of 500 hours including a maximum of 40 hours by night may be credited towards the 1500 hours for the issue of an ATPL.
- (c) The flight time referred to in this regulation may be entered in the co-pilot column of the logbook provided the words "Third Pilot" shall be entered in the "Remarks" column of the pilot's logbook.

Theoretical knowledge examinations

- **61.01.10** (1) The Director must publish in an AIC the general procedures, as contained in Document SA-CATS 61, to be followed by a person applying to be entered for a theoretical knowledge examination, as well as the conditions under which theoretical knowledge examinations shall be conducted by the Civil Aviation Authority.
- (2) An applicant wishing to enter for the theoretical knowledge examinations conducted by the Authority shall show proof of –

- (a) holding, or having held within the previous 60 months, one of the following:
 - (i) a valid South African SPL or a valid National Pilot licence for entry to a PPL examination;
 - (ii) a valid South African SPL or a PPL for entry to a CPL or ATPL examination, where the holder is a student on an integrated course for the licence;
 - (iii) a valid South African PPL for entry to a CPL examination;
 - (iv) a valid South African CPL for entry to an ATPL examination;
 - (v) an equivalent pilot licence to those specified in subparagraphs (i) to (iv) above issued by a Contracting State.
- (b) having attended the prescribed theoretical knowledge course with an approved Part 141 ATO at any one time during the previous 60 months.
- (3) A temporary medical restriction of a licence may not bar a candidate from entering a theoretical knowledge examination.
- (4) The pass mark for any theoretical knowledge examination referred to in this Part is 75%.
- (5) An applicant for the issuing of a pilot licence or the issuing, revalidation or reissuing of a rating, who fails a theoretical knowledge examination required for such licence or rating conducted by the Authority, may apply to the Director for re-mark in accordance with Document SA-CATS 61.

Curtailment of privileges of licence holders aged 60 years or more

- **61.01.11** (1) A holder of a pilot licence who has attained the age of 60 years may not act as pilot of an aircraft engaged in international commercial air transport operations, except as a member of a multi-pilot crew and provided that such holder is the only member of the multi-pilot crew who has attained the age of 60 years or where the relevant authority of a foreign state has given permission for a pilot to be a member of the aircraft's flight crew notwithstanding his or her age.
- (2) A holder of a pilot licence who has attained the age of 65 years may not act as PIC of an aircraft engaged in international commercial air transport operations.

Flight simulation training device

- **61.01.12** (1) Each flight simulation training device (FSTD used for training, and for which a candidate for the issue, revalidation, re-issue or maintenance of competency requirement to receive credit, must be approved by the Director for each particular purpose in terms of regulation 61.01.17, taking into consideration
 - (a) the training, testing or checking for which it is to be used;
 - (b) the particular manoeuvre, procedure, or crew member function to be performed; and
 - (c) the representation of the specific category and class of aircraft, type of aircraft, or particular variation of the type of aircraft.

- (2) The Director may approve any other device for a purpose not provided for in sub-regulation (1).
- (3) The Director may approve any of the devices, referred to in sub-regulations (1) and (2) on the basis of a similar approval by the regulatory body of a Contracting State.

Recognition, validation and conversion of foreign pilot licences and ratings

- **61.01.13** (1) The Director may recognise, through temporary validation or permanent conversion, on the conditions prescribed in this Part, pilot licences and ratings issued by an appropriate authority of a Contracting State if the standard of such foreign licence or rating is deemed to be equivalent to, or higher than, the South African licence or rating.
- (2) (a) A person who holds a current and valid pilot licence issued by another Contracting State in accordance with ICAO Annex 1 to the Convention, may apply for a validation or conversion of such licence and associated ratings, for use on aircraft registered in South Africa.
- (b) A foreign licence or rating shall only be validated or converted provided the minimum experience requirements for the issue of the applicable South African licence or rating have been met.
- (3) Where the country of issue is not a Contracting State or does not comply with Annexes 1 and 6 to the Convention, then the foreign licence holder must undergo bridging training to the extent determined by the Director in individual cases and thereafter further assessment of competence to ensure compatibility with the relevant South African licensing standards.
- (4) Before the Director validates or converts a foreign licence or rating for a commercial air transport operation or a PPL with Instrument Rating (PPL/IR), he or she must confirm the validity of the foreign licence or rating with the appropriate authority of the issuing Contracting State.
- (5) Notwithstanding the provisions of sub-regulations (1) and (2), any applicant for the validation of a foreign licence or rating must undergo the appropriate skills test and
 - (a) in the case of validation for use as a private pilot under VFR conditions (PPL/VFR), must –
 - (i) have attended a tutorial, conducted by at least a Grade III flight instructor at an approved Part 141 ATO on the differences in airspaces and terminology within South Africa;
 - (ii) have received a briefing on performance planning, taking into account the effect of density altitude; and
 - (iii) write an Authority approved examination in South African Air Law conducted by an approved Part 141 ATO; or
 - (b) in the case of validation for use as a private pilot under IFR conditions (PPL/IFR) must –

- (i) have attended a tutorial, conducted by at least a Grade II flight instructor at an approved Part 141 ATO on the differences in airspaces and terminology within South Africa:
- (ii) have received a briefing on performance planning taking into account the effect of density altitude; and
- (iii) pass an examination on South African Air Law and Procedures at an approved Authority Examination Centre; or
- (c) in the case of validation for use as a commercial pilot under VFR conditions (CPL/VFR), must have passed an examination in South African Air Law at CPL level at an approved Authority Examination Centre; or
- (d) in the case of validation for use as a commercial pilot under IFR conditions (CPL/IFR) or as an airline transport pilot, must have passed an examination in South African Air Law and Procedures at an approved Authority Examination Centre; and
- (6)(a) Notwithstanding the provisions of regulation 61.01.14(20), a certificate of validation of a foreign licence for commercial purposes may only be issued for a particular purpose.
- (b) The expiry date of such certificate of validation shall coincide with the date of expiry of the medical certificate of the applicant but shall not exceed a period of twelve months.
- (c) If the medical certificate expires within the initial 12 month period, then the certificate of validation may be revalidated for a further period not exceeding 12 months from original date of issue of the certificate of validation.
- (d) Under exceptional circumstances, the Director may extend the period of validation by one further period of 12 months.
- (e) The certificate of validation for a PPL is valid for a period of 60 months from date of successful completion of the applicable skills test.
- (f) The privileges of the validation may only be exercised if the holder has a current and valid foreign licence and complies with the recency and maintenance of competency requirements of Subpart 3 of this Part as applicable.
- (7) In the case of validated foreign pilots flying South African registered aircraft in a foreign country, a certificate of validation for commercial purposes may be re-issued annually, provided that the operation is flown exclusively outside the borders of South Africa and that any flying carried out in South Africa is for the purpose of a ferry flight for pre- or post-maintenance purposes or for the purpose of a revalidation check.
- (8) The purposes for which a certificate of validation may be issued include any or a combination of the following
 - (a) to exercise the privileges of a private pilot in a South African registered aircraft;

- (b) to ferry a South African registered aircraft from one foreign country to another, or from a foreign country to South Africa;
- (c) to conduct demonstration flights in South African registered aircraft;
- (d) to conduct familiarisation, difference training or route training of South African flight crew;
- to provide its holder with time to complete prescribed bridging training for the conversion of the foreign licence or rating while acting as a flight crew member on a South African registered aircraft during commercial operations; and
- (f) in case of a dry- or wet-lease agreement in terms of Part 48.
- (9) The privileges of a validated foreign licence may not be exercised for commercial air transport operations, except when issued for the purpose referred to in sub-regulation (7) and paragraphs (e) and (f) of sub-regulation (8), and except by written permission of the Director for the purposes of route training.
- (10) A South African licence, issued wholly or in part on the strength of a foreign licence, must indicate the Contracting State that issued the licence upon which the conversion was based.
- (11) For the issuing of a South African pilot licence or rating, the Director may not recognise foreign examination credits in isolation; i.e., for a conversion the applicant must be the holder of the appropriate valid licence or rating. If such is not the case, the applicant must pass all the relevant South African examinations.
- (12) A foreign licence, if qualifying for the issue of a certificate of validation in terms of these Regulations, or for which a certificate of validation has been issued, may be accepted as the entry requirement for the issue of a higher South African pilot licence.

Validation of a foreign pilot licence and ratings

- (13) The application for a certificate of validation of a pilot licence or rating issued by the appropriate authority of a Contracting State should be made to the Director on the appropriate prescribed form.
- (14) The Director may validate a pilot licence and ratings issued by an appropriate authority of a Contracting State
 - (a) subject to the same restrictions which apply to such foreign pilot licence and ratings;
 - subject to such conditions and limitations as the Director may deem necessary in the interest of aviation safety;
 - (c) in accordance with, and subject to, the requirements and conditions as prescribed in these Regulations;
 - (d) on condition that the privileges may not exceed that of the South African pilot licence or rating.

- (15) The application for a certificate of validation must be accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the pilot licence and ratings for which the validation is requested;
 - (c) a certified true copy of a valid foreign or local medical certificate;
 - (d) a summary of the applicant's logbook, certified by the applicant to be a true reflection of the hours flown;
 - (e) proof of English language proficiency compliance in terms of regulation 61.01.7; and
 - (f) any other document prescribed in Document SA-CATS 61.
- (16) The minimum knowledge, experience and skill requirements for the issuing of a certificate of validation for the various pilot licences and ratings are those prescribed in Document SA-CATS 61 for the equivalent South African licences or ratings.
- (17) Where a practical flight test is required, such test must be undertaken in an aircraft of the category, class or type, appropriate to the pilot licence for which a certificate of validation is sought, or in a FSTD approved for the purpose.
- (18) The holder of a certificate of validation must comply with all the applicable provisions of these Regulations.
- (19) Before the privileges of an additional rating may be exercised in terms of the certificate of validation, such additional privileges must have been endorsed on the foreign pilot licence by the appropriate foreign authority.
- (20) The period of validity of a certificate of validation issued for the purposes of a lease agreement in terms of Part 48, shall be the duration of the lease agreement.
- (21) A certificate of validation shall become invalid as soon as the corresponding foreign licence or rating/s has or have been suspended or revoked by the issuing authority.
- (22) Except when issued for the purpose referred to in sub-regulation (7), a certificate of validation for commercial purposes may only be reissued once, at the discretion of the Director and only in exceptional cases, on condition that the applicant provides sufficient proof that he or she has complied with all requirements of the country of issue of the foreign licence or rating in respect of maintenance of competency.
- (23) In order to meet short-term operational requirements, the Director may, in exceptional cases, exempt the applicant from all or some of the requirements of this Part, subject to conditions set by him or her in each particular case.

Conversion of a foreign pilot licence and ratings

(24) The holder of a valid South African validation issued in terms of the Air Navigation Regulations, 1976, or the holder of a pilot licence and rating issued by an appropriate authority

of a Contracting State may apply for the conversion of his or her licence, without having to pass the theoretical knowledge or practical skills tests required by Part 61 provided that –

- (a) the validation had been held for an uninterrupted period of 3 years or more immediately preceding 1 January 2008; and
- (b) the holder has acquired not less than 750 hours flight time in the three years referred to in paragraph (a) above.
- (25) The application for the issuing of a South African pilot licence or any rating on the strength of a foreign pilot licence or rating must be made in the prescribed form and the applicant must meet all the requirements laid down in sub-regulation (26).
- (26) Notwithstanding sub-regulations (24) and (25), an applicant applying for the conversion of his or her foreign pilot licence must attach to his or her application the following documentation-
 - (a) a letter of motivation for conversion of the licence;
 - (b) an up-to-date Curriculum Vitae;
 - (c) his or her logbook containing -
 - (i) the last 12 months' summary;
 - (ii) endorsements of all class or type ratings; and
 - (iii) endorsements of the last revalidation of his or her licence, class or type and instrument flight ratings;
 - (d) his or her licence; and
 - (e) a valid South African medical certificate, as applicable.
- (27) All new applicants for the conversion of a licence shall be required to pass the theoretical examination at the appropriate level as prescribed below
 - (a) PPL (PPL/VFR)
 - (i) Air Law
 - (ii) Meteorology
 - (iii) Flight Performance and Planning.
 - (b) PPL with Instrument Rating
 - (i) Air Law and Procedures
 - (ii) Meteorology
 - (iii) Flight Performance and Planning.
 - (c) CPL (CPL/VFR) -
 - (i) Air Law
 - (ii) Meteorology
 - (iii) Flight Performance and Planning.

- (d) CPL with Instrument Rating (CPL/IR) -
 - (i) Air Law and Procedures
 - (ii) Meteorology
 - (iii) Flight Performance and Planning.
- (e) ATPL -
 - (i) Air Law and Procedures
 - (ii) Meteorology
 - (iii) Flight Performance and Planning.

Training for the conversion of a licence, rating or validation

(28) The applicant shall be required to attend training at an approved Part 141 ATO and receive tuition at the discretion of the Chief Flying Instructor (CFI) with respect to differences in South African airspaces, flight performance and planning and typical Southern Africa weather patterns. The CFI shall issue a letter of recommendation to the applicant to gain entry to the Authority on-line examinations.

Skills tests for the conversion of a licence, rating or validation

- (29) The applicant for the conversion of a licence shall be required to undergo a skills test which in the case of a PPL (VFR) may be conducted by the holder of a Grade I or II flight instructor rating who has been designated for the purpose by the CFI of the Part 141 approved ATO or a DFE, and in all other cases must be conducted by a DFE as shown below
 - (a) PPL (PPL/VFR)-skills test as for an initial issue;
 - (b) PPL with Instrument Rating (PPL/IR)–skills test for revalidation of an instrument rating;
 - (c) CPL (CPL/VFR)-skills test as for an initial issue;
 - (d) CPL with Instrument Rating (CPL/IR)–skills test for revalidation of an instrument rating.
 - (e) ATPL-skills test for revalidation of an instrument rating.

Conversion of foreign instructor rating

(30) A foreign instructor rating may be converted to a Grade III Flight Instructor Rating upon compliance with regulation 61.12.1(1)(a), (c) and (f) or 61.15.1(1)(a), (c) and (f), as appropriate.

Register of licences

61.01.14 (1) The Director must maintain, and keep in a safe place, a register of all pilot licences and ratings issued or validated in terms of this Part.

- (2) The register must contain the following particulars, which must be recorded immediately upon issuing the licence or rating or validation
 - (a) the full name of the holder of the licence;
 - (b) date of birth;
 - (c) the postal and residential address of the holder of the licence;
 - (d) the date on which the licence was issued or validated;
 - (e) particulars of the ratings held by the holder of the licence; and
 - (f) the nationality of the holder of the licence.
- (3) A licence holder must notify the Director within 14 days of any change of the particulars referred to in sub-regulation (2).
- (4) Any person may obtain a copy of the register upon payment of the fee as prescribed in Part 187: Provided that postal and residential addresses may not be divulged to third parties, except if otherwise directed by the court of law.

Training for acquiring licence, rating or validation

- **61.01.15** (1) Training for the purpose of acquiring a licence, rating or validation as required by this Part, may only be provided by the holder of an ATO approval issued in terms of Part 141 and under the provisions set out in Document SA-CATS 61.
- (2) For training towards the issue of a pilot licence to be recognised as integrated training, such training must be conducted in accordance with an approved training course, meeting the conditions, requirements, rules, procedures and standards as prescribed in Appendix 3.0 to Document SA-CATS 61–CPL/IR(A)/ATPL(A) Integrated Course.

Payment of currency fee

- **61.01.16** (1) (a) The holder of a pilot licence must pay the annual currency fee as prescribed in Part 187 on or before the anniversary date of the licence.
- (b) The privileges of the licence may not be exercised in the succeeding year unless all outstanding fees are paid in full.
- (2) The payment must, where applicable, be accompanied by the annual summary as prescribed by regulation 61.01.5(9).

Approval of flight simulation training devices

- **61.01.17** (1) The approvals for FSTD must be issued based on the criteria set out in Document SA-CATS 61.
- (2) The Director must issue a registration designator for each approved FSTD.

Endorsements and record keeping

- **61.01.18** (1) An applicant for a licence, rating, revalidation, class or type rating or any familiarisation or differences training must have the applicable endorsements in his or her pilot logbook as described in Document SA-CATS 61.
- (2) The endorsement must include, but is not limited to, the following details
 - (a) Date of the skills test;
 - (b) Aircraft registration and type;
 - (c) Name and licence number of examiner;
 - (d) Name of the ATO.
- (3) The flight examiner conducting a skills test or revalidation check shall stamp, sign, initial and date the applicable form for each candidate, as required, before forwarding to the Director for processing and record keeping: the stamp shall include the following details
 - (a) Initials and surname of flight instructor or examiner;
 - (b) Pilot licence number of flight instructor or examiner;
 - (c) Designation applicable to the flight instructor or examiner, such as Grade I or II flight instructor or DFE I (A), (H), DFE II (A), (H) or DFE III (A), (H) as the case may be.
- (4) Incorrect information contained on the stamp referred to in sub-regulation (3) shall invalidate the form.

SUBPART 2: STUDENT PILOT LICENCE

Requirements for a SPL

- 61.02.1 An applicant for a SPL shall
 - (a) be 15 years or older, except where provided otherwise in Part 62;
 - (b) hold a valid Class 1 or 2 medical certificate issued in terms of Part 67;
 - (c) be registered with an approved aviation training organization for training towards a PPL.

Application for a SPL

- **61.02.2** The application for a SPL must be made to the Director on the appropriate prescribed form, and must be accompanied by
 - (a) an original or certified proof of the identity of the applicant;
 - (b) proof of the age of the applicant;
 - (c) a valid Class 1 or Class 2 medical certificate issued in terms of Part 67;

- (d) the appropriate aircraft by name on which training will be conducted, provided that in the case of helicopters, that the student pilot will be restricted to two types of aircraft:
- (e) two recent passport-size photographs of the applicant; and
- (f) the appropriate fee as prescribed in Part 187.

Issuing of a SPL

- **61.02.3** (1) The Director shall issue a SPL in the appropriate prescribed form, as by the Director, if the applicant complies with the requirements referred to in regulation 61.02.2.
- (2) Upon receipt of the SPL, the holder must immediately affix his or her signature thereon in ink in the space provided for such purpose.

Validity of a SPL

- **61.02.4** (1) A SPL is valid for a period of 2 years from the date of issue, provided the annual currency fees are paid.
- (2) The holder of a valid SPL may not exercise the privileges of that licence unless he or she
 - (a) is in the possession of a valid Class 1 or Class 2 medical certificate, issued to him or her in terms of Part 67; and
 - (b) has submitted a copy of the medical certificate to the licensing authority, as required in regulation 61.01.6(6), in the event that the aviation medical examiner is unable to submit electronic data to the Director.

Privileges and limitations of SPL

- **61.02.5** (1) The holder of a valid SPL may only fly solo as prescribed in Document SA-CATS 61 for the purpose of training for the applicable pilot licence
 - in the type of aircraft in which he or she is undergoing training as endorsed in his or her logbook;
 - (b) after a prior written authorisation thereto for a flight, or a sequence of flights, as prescribed in the relevant curriculum and all such flights are under the supervision of the holder of an appropriate and valid flight instructor rating, or a person appointed by the Chief Flying Instructor, provided that such person is the holder of at least a PPL.
 - (c) without carrying any passengers;
 - (d) on a flight other than an international flight; and
 - (e) in VMC by day.
- (2) Notwithstanding the provision of sub-regulation (1)(e), a student undergoing the integrated training may exercise the privileges of his or her SPL also
 - (a) in VMC by night, if he or she is the holder of a valid night rating; and
 - (b) under IFR, if he or she is the holder of a valid instrument rating.

- (3) Except in an emergency, a student pilot may not land or take-off in an aeroplane from an area other than an aerodrome.
- (4) If a student pilot has executed an emergency landing with an aeroplane in an area other than an aerodrome, only the holder of a CPL or ATPL, or another pilot approved for the purpose in writing by the Director, may fly that aeroplane out of that area.

Ratings for special purposes for a SPL

- **61.02.6** (1) A student pilot, undergoing the integrated training may undergo training for, and apply for, a night rating.
- (2) An application for the night rating must be made in accordance with the provisions of Subpart 14.

SUBPART 3: PRIVATE PILOT LICENCE (AEROPLANE)

Requirements for a PPL (Aeroplane)

- **61.03.1** (1) An applicant for a PPL (Aeroplane) must
 - (a) be 17 years or older;
 - (b) hold a valid Class 1 or Class 2 medical certificate, issued in terms of Part 67;
 - (c) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
 - (d) show evidence of holding a valid SPL, or having held within the previous 60 months, any of the following
 - (i) a pilot licence (aeroplane) issued by a Contracting State;
 - (ii) a national pilot licenceissued in terms of Part 62:
 - (e) have successfully completed the training as prescribed in Document 61 at an approved Part 141 ATO;
 - (f) have passed the theoretical knowledge examination as prescribed in Document SA-CATS 61; and
- (2) An applicant for a PPL (Aeroplane) must have completed not less than 45 hours flight time as pilot of an aeroplane with a MCM in excess of 450 kg of which
 - (a) at least 25 hours are dual instruction in aeroplanes; and
 - (b) at least 15 hours are accumulated in solo flight, of which at least five hours are cross-country flight time; which must include one triangular cross-country flight of at least 150 NM, on which at least one point must be not less than 50 NM from base and must include full-stop landings at two different aerodromes away from base.
- (3) South African Air Force Pilots may apply for exemption from some or all of these requirements as indicated in regulation 61.01.9(23).

(4) Notwithstanding the provisions of sub-regulation (2) above, the flight time required for the holder of a pilot licence issued in terms of Part 62, may be substituted by the flying hours obtained, to the maximum specified in regulation 61.01.9(9).

Application for and issue of a PPL (Aeroplane)

- **61.03.2** (1) An application for a PPL (Aeroplane) must be made to the Director on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulations (1) must be accompanied by
 - (a) a valid Class 1 or Class 2 medical certificate, issued in terms of Part 67;
 - (b) documentary evidence of compliance with regulation 61.03.1 (1)(d);
 - (c) the original documentation proving that the applicant has passed the theoretical knowledge examination referred to in paragraph (f) of regulation 61.03.1(1);
 - (d) the applicant's flying logbook summarised in the format as prescribed in Document SA-CATS 61:
 - (e) the skills test report as prescribed in Document SA-CATS 61;
 - (f) two recent passport-size photographs of the applicant, unless such applicant is the holder of another pilot licence issued in terms of Part 61; and
 - (g) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue a PPL (Aeroplane), if he or she is satisfied that the applicant complies with the requirements referred to in regulation 61.03.1.
- (4) A PPL (Aeroplane) must be issued in the appropriate prescribed form, as .
- (5) The holder of a PPL (Aeroplane) must, upon receipt of the PPL (Aeroplane), immediately affix his or her signature thereon in ink in the space provided for such purpose.

Theoretical knowledge examination for a PPL (Aeroplane)

61.03.3 The applicant must have passed all the theoretical knowledge examinations for a Private -Pilot licence (Aeroplane) referred to in paragraph (f) of sub-regulation 61.03.1(1) within a period of 18 months of obtaining the first credit and must have passed the final theoretical knowledge examination within the 36 months preceding the skills test for a PPL (Aeroplane).

Skills test for a PPL (Aeroplane)

- **61.03.4** (1) The applicant must undergo the skills test for a PPL (Aeroplane) referred to in paragraph (g) of sub-regulation 61.03.1(1) within 30 days of the last period of dual instruction.
- (2) The applicant must pass a skills test demonstrating to a Chief Flying Instructor (Aeroplane) (CFI/A) of an approved Part 141 ATO or a Grade II or I flight instructor (Aeroplane) appointed in terms of Document SA-CATS 61 by the CFI of the approved Part 141 ATO, the ability to execute as PIC of an aeroplane the procedures and manoeuvres prescribed in Document SA-

CATS 61 with a degree of competence appropriate to the privileges granted to the holder of a PPL (Aeroplane).

- (3) The holder of a PPL (Aeroplane) who has not flown a minimum of 3 hours as PIC of aeroplanes in the six months preceding a revalidation check shall undergo sufficient ground and flight training at an approved ATO, to reach the standard required for the revalidation check of a PPL (Aeroplane), and meet the recency requirements to act as PIC.
- (4) The initial skills test and revalidation check shall be conducted in an aircraft with a MCM in excess of 450 kg.

Privileges and limitations of a PPL (Aeroplane)

- **61.03.5** (1) The holder of a PPL (Aeroplane) may not exercise the privileges of that licence unless he or she
 - (a) is in possession of a valid Class 1 or Class 2 medical certificate, issued to him or her in terms of Part 67:
 - (b) has submitted a copy of the medical certificate to the licensing authority, as required in regulation 61.01.6(6) in the event that the aviation medical examiner is unable to submit electronic data to the Director; and
 - (c) complies with the Maintenance of Competency requirements.
- (2) The holder of a valid PPL (Aeroplane) may, in VMC, act as PIC or co-pilot in any aeroplane for which he or she holds the appropriate valid class rating or type rating.
- (3) To provide for special VFR, the holder of a PPL (Aeroplane) may fly in IMC, in sight of the surface and clear of cloud, fog or mist within a control zone, after being authorised to do so by the responsible air traffic services controller.
- (4) If the holder of a PPL (Aeroplane) has the appropriate valid rating, he or she may furthermore exercise the privileges of the licence for any of the special purposes referred to in regulation 61.03.8.
- (5) The holder of a PPL (Aeroplane) may
 - (a) act as co-pilot of any aeroplane on which a co-pilot is not a requirement;
 - (b) may not act as PIC of an aeroplane that is carrying passengers or freight for reward or hire.
 - (c) may not be remunerated for acting in any pilot capacity in an aeroplane.
 - (d) act as a pilot-in command of an aeroplane in the course of his or her own or employer's business, provided that
 - (i) the flight is only incidental to that business or employment; and
 - (ii) the aeroplane does not carry passengers or freight for reward or hire.

Period of validity of a PPL (Aeroplane)

- **61.03.6** A PPL (Aeroplane) is valid for a period of 10 years provided that
 - (a) currency fees are paid in terms of regulation 61.01.17;
 - (b) competency is maintained in terms of regulation 61.03.7;
 - (c) annually, together with the fee referred to in paragraph (a), the completed application form as prescribed in regulation 61.03.2(2) is submitted including certified copies of the last 3 pages of the logbook containing entries indicating a record of flight times, an annual summary indicating flight time per category, class, type and total time as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Maintenance of Competency for a PPL (Aeroplane)

- **61.03.7** (1) The holder of a PPL (Aeroplane) shall undergo a revalidation check within 12 months from the date of initial issue and thereafter within a period of 24 months calculated from
 - (a) the date of re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the maintenance of competency if such maintenance of competency is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such maintenance of competency if revalidated prior to the period referred to in sub-paragraph (i).
- (2) The holder of a PPL (Aeroplane) who has not maintained competency by passing a revalidation check or an initial licence skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence shall comply with the following requirements:
 - (a) in the case of a holder of a PPL where the maintenance of competency has lapsed by not more than 36 months, the licence holder shall be required to:
 - (i) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a PPL (Aeroplane), and meet the recency requirements to act as PIC; and;
 - (ii) pass a revalidation check in the same category of aircraft;
 - (b) in the case of a holder of a PPL where the maintenance of competency has lapsed by more than 36 months, but not more than 60 months, the licence holder shall be required to:
 - (i) rewrite the Air Law examination;
 - (ii) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a PPL (Aeroplane), and meet the recency requirements to act as PIC; and
 - (iii) pass an initial licence skills test in the same category of aircraft;

- (c) in the case of a holder of a PPL where the maintenance of competency has lapsed by more than 60 months, the licence holder shall be required to comply with the initial issue requirements of Subpart 61.03.
- (3) In the event of the Maintenance of Competency requirements of a PPL (Aeroplane) not being complied with, the holder of a PPL (Aeroplane) may automatically continue to exercise the privileges of a SPL (Aeroplane), without being subject to the requirements of flight authorisation by a flight instructor acting at an approved Part 141 ATO.

Ratings for special purposes for a PPL (Aeroplane)

- **61.03.8** (1) The ratings for special purposes associated with a PPL (Aeroplane) are
 - (a) night rating;
 - (b) instrument rating;
 - (c) post-maintenance test flight rating;
 - (d) tug pilot rating;
 - (e) touring glider rating;
 - (f) agricultural pilot rating;
 - (g) aerobatics rating; and
 - (h) tow pilot rating.
- (2) An application for any rating referred to in sub-regulation (1) must be made in accordance with the regulations contained in Subparts 10, 11, 19, 20, 25, or 27, as the case may be.

Recency requirements for a PPL (Aeroplane)

61.03.9 (1) The holder of a PPL (Aeroplane) shall comply with the recency requirements of regulation 91.02.4.

SUBPART 4: PRIVATE PILOT LICENCE (HELICOPTER)

Requirements for a PPL (Helicopter)

- **61.04.1** (1) An applicant for a PPL (Helicopter) must
 - (a) be 17 years or older;
 - (b) hold a valid Class 1 or Class 2 medical certificate, issued in terms of Part 67;
 - (c) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
 - (d) show evidence of holding a valid SPL, or having held within the previous 60 months, any of the following
 - (i) a pilot licence (Helicopter) issued by a Contracting State;
 - (ii) a Recreational Pilot Licence issued in terms of Part 62;

- (e) have successfully completed the training as prescribed in Document 61 at an approved Part 141 ATO;
- (f) have passed the theoretical knowledge examination as prescribed in Document SA-CATS 61.
- (g) have passed the skills test referred to in regulation 61.04.4.
- (2) An applicant for a PPL (Helicopter) must have completed not less than 50 hours flight time as pilot of an helicopter of which
 - (a) at least 25 hours are dual instruction in helicopters; and
 - (b) at least 15 hours are accumulated in solo flight, of which five hours are cross-country flight time;
- (3) The solo cross-country flight time referred to in sub-regulation (2)(b) above must include one triangular cross-country flight of at least 100 NM, in the course of which full-stop landings at two different aerodromes away from base must have been made.
- (4) A maximum of 5 hours dual instruction time may be accumulated in a helicopter FSTD approved for the purpose by the Director.
- (5) South African Air Force pilots may apply for exemption for some or all of these requirements as indicated in sub-regulation 61.01.9(23).

Application for and issue of PPL (Helicopter)

- **61.04.2** (1) An application for a PPL (Helicopter) must be made to the Director on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulation (1) must be accompanied by
 - (a) a valid Class 1 or Class 2 medical certificate, issued in terms of Part 67;
 - (b) documentary evidence of compliance with regulation 61.04.1(1)(d);
 - (c) the original documentation proving that the applicant has passed the theoretical knowledge examination referred to in paragraph (f) of regulation 61.04.1(1);
 - (d) the applicant's flying logbook summarised in the format as prescribed in Document SA-CATS 61;
 - (e) the skills test report as prescribed in Document SA-CATS 61;
 - (f) two recent passport-size photographs of the applicant, unless such applicant is the holder of another pilot licence issued in terms of Part 61; and
 - (g) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue a PPL (Helicopter), if he or she is satisfied that the applicant complies with the requirements referred to in regulation 61.04.1.
- (4) A PPL (Helicopter) must be issued in the appropriate prescribed form.
- (5) The holder of a PPL (Helicopter) must, upon receipt of the PPL (Helicopter), immediately affix his or her signature thereon in ink in the space provided for such purpose.

Theoretical knowledge examination for PPL (Helicopter)

61.04.3 The applicant must have passed all the theoretical knowledge examinations for a PPL (Helicopter) referred to in paragraph (f) of regulation 61.04.1(1), within a period of 18 months of obtaining the first credit and must have passed the final theoretical knowledge examination within the 36 months preceding the skills test for a PPL (Helicopter).

Skills test for PPL (Helicopter)

- **61.04.4** (1) An applicant for the issuing of a PPL (Helicopter) must undergo the skills test for a PPL (Helicopter), referred to in paragraph (g) of regulation 61.04.1(1), within 30 days of the last period of dual instruction.
- (2) The applicant must pass a skills test demonstrating to a Chief Flying Instructor (Helicopter) (CFI/H) of an approved Part 141 ATO, or a Grade II or Grade I Flight Instructor (Helicopter) appointed in terms of Document SA-CATS 61 by the CFI/H of the approved Part 141 ATO, the ability to execute as PIC of a helicopter the procedures and manoeuvres prescribed in Document SA-CATS 61 with a degree of competence appropriate to the privileges granted to the holder of a PPL (Helicopter).
- (3) The holder of a PPL (Helicopter) who has not flown a minimum of 3 hours as PIC of helicopters in the six months preceding a revalidation check shall undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a PPL (Helicopter), and meet the recency requirements to act as PIC.

Privileges and limitations of a PPL (Helicopter)

- **61.04.5** (1) The holder of a PPL (Helicopter) may not exercise the privileges of that licence unless he or she
 - (a) is in possession of a valid Class 1 or Class 2 medical certificate, issued to him or her in terms of Part 67;
 - (b) has submitted a copy of the medical certificate to the licensing authority, as required in regulation 61.01.6(6) in the event that the aviation medical examiner is unable to submit electronic data to the Director; and
 - (c) complies with the Maintenance of Competency requirements.
- (2) The holder of a valid PPL (Helicopter) may, by day in VMC, act as PIC or co-pilot of any helicopter for which he or she holds the appropriate valid type rating.
- (3) To provide for special VFR, the holder of a PPL (Helicopter) may fly in IMC, in sight of the surface and clear of cloud, fog or mist within a control zone, after being authorised to do so by the responsible air traffic services controller.

- (4) If the holder of a PPL (Helicopter) has the appropriate valid rating, he or she may furthermore exercise the privileges of the licence for any of the special purposes referred to in regulation 61.04.8.
- (5) The holder of a PPL (Helicopter) may
 - (a) act as co-pilot of any helicopter on which a co-pilot is not a requirement;
 - (b) not act as PIC of an helicopter that is carrying passengers or freight for reward or hire.
 - (c) not be remunerated for acting in any pilot capacity in an helicopter.
 - (d) act as a pilot-in command of a helicopter in the course of his or her own or employer's business, provided that
 - (i) the helicopter is not used as an essential or integral part in the furtherance of that business;
 - (ii) the cost of the helicopter and or pilot is not recovered directly from the proceeds generated by the use of the helicopter;
 - (iii) the helicopter does not perform a service for reward in any form; and
 - (iv) the helicopter does not carry passengers or freight for reward or hire.

Period of validity of a PPL (Helicopter)

- **61.04.6** A PPL (Helicopter) is valid for a period of 10 years provided that
 - (a) currency fees are paid in terms of regulation 61.01.17;
 - (b) competency is maintained in terms of regulation 61.04.7;
 - (c) annually, together with the fee referred to in paragraph (a), the completed application form as prescribed in regulation 61.04.2(2) is submitted including certified copies of the last 3 pages of the logbook containing entries indicating a record of flight times, an annual summary indicating flight time per category, class, type and total time as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Maintenance of competency for a PPL (Helicopter)

- **61.04.7** (1) A PPL (Helicopter) shall undergo a revalidation check within 12 months from the date of initial issue and thereafter within a period of 24 months calculated from
 - (a) the date of re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the maintenance of competency if such maintenance of competency is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such maintenance of competency if revalidated prior to the period referred to in sub-paragraph (i).

- (2) The holder of a PPL (Helicopter) who has not maintained competency by passing a revalidation check or an initial licence skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence shall comply with the following requirements:
 - (a) in the case of a holder of a PPL where the maintenance of competency has lapsed by not more than 36 months, the licence holder shall be required to:
 - (i) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a PPL (Helicopter), and meet the recency requirements to act as PIC; and
 - (ii) pass a revalidation check in the same category of aircraft;
 - (b) in the case of a holder of a PPL where the maintenance of competency has lapsed by more than 36 months, but not more than 60 months, the licence holder shall be required to:
 - (i) rewrite the Air Law examination;
 - (ii) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a PPL (Helicopter), and meet the recency requirements to act as PIC; and
 - (iii) pass an initial licence skills test in the same category of aircraft;
 - (c) in the case of a holder of a PPL where the maintenance of competency has lapsed by more than 60 months, comply with the initial issue requirements of Subpart 61.04.

Ratings for special purposes for a PPL (Helicopter)

- **61.04.8** (1) The ratings for special purposes associated with a PPL (Helicopter) are
 - (a) night rating;
 - (b) instrument rating;
 - (c) post-maintenance test flight rating;
 - (d) agricultural pilot rating; and
 - (e) helicopter game or livestock cull rating.
- (2) An application for any rating referred to in sub-regulation (1) must be made in accordance with the regulations contained in Subparts 10, 11, 29, 24 and 25, as the case may be.

Recency requirements for a PPL (Helicopter)

61.04.9 The holder of a PPL (Helicopter) shall comply with the recency requirements of regulation 91.02.4.

SUBPART 5: COMMERCIAL PILOT LICENCE (AEROPLANE)

Requirements for CPL (Aeroplane)

- **61.05.1** (1) An applicant for a CPL (Aeroplane) must
 - (a) be 18 years or older;
 - (b) hold a valid Class 1 medical certificate, issued in terms of Part 67;
 - (c) hold at least a valid general certificate of proficiency in radiotelephony (aeronautical);
 - (d) produce evidence of holding or having held, within the previous 60 months, one of the following:
 - (i) a South African PPL (Aeroplane);
 - (ii) a pilot licence (aeroplane) issued by a Contracting State;
 - (iii) a SPL where the applicant has completed an integrated training course approved by the Authority;
 - (e) have successfully completed the training as prescribed in Document 61 at an approved Part 141 ATO;
 - (f) have passed the theoretical knowledge examination as prescribed in Document SA-CATS 61.
 - (g) have passed the skills test referred to in regulation 61.05.4; and
 - (h) hold a valid night rating (aeroplane).
- (2) An applicant for a CPL (Aeroplane) must have completed not less than
 - (a) 200 hours of flight time, which may include 20 hours of flight instruction time in a FSTD, approved for the purpose; or
 - (b) 150 hours of flight time if he or she has successfully completed the integrated training referred to in regulation 61.01.15.
- (3) The total of 200 hours or 150 hours, as the case may be, referred to in sub-regulation (2), must include
 - (a) 100 hours as PIC, or 70 hours as PIC in the case of an applicant who has undergone the integrated training; and
 - (b) 20 hours of cross-country flight time as PIC, including one flight of not less than 300 NM, in the course of which full-stop landings at not less than two different aerodromes away from base must have been made; and
 - (c) 5 hours of night flying as PIC, including not less than 10 take-offs and 10 landings by night, and a cross-country flight of at least three legs, each of a minimum length of 50 NM; and
 - (d) 20 hours of instrument instruction time, of which not more than 10 hours may have been acquired in a FSTD; and
 - (e) least 5 hours instruction in an aeroplane with adjustable flaps, retractable undercarriage and variable pitch propeller or turbojet engine.

(4) A South African Air Force pilot or navigator may apply for exemption for some or all of these requirements as indicated in sub-regulation 61.01.9(23).

Application for and issue of CPL (Aeroplane)

- **61.05.2** (1) An application for a CPL (Aeroplane) must be made to the Director on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulation (1) must be accompanied by
 - (a) a valid Class 1 medical certificate, issued in terms of Part 67;
 - (b) documentary evidence of compliance with regulation 61.05.1 (1)(d);
 - (c) the original documentation or certified copies of the documents proving that the applicant has passed the theoretical knowledge examination referred to in regulation 61.05.1(1)(f) and 61.01.10;
 - (d) the applicant's flying logbook summarised in the format as prescribed in the Document SA-CATS 61;
 - (e) the skills test report as prescribed in Document SA-CATS 61;
 - (f) two recent passport-size photographs of the applicant, unless such applicant is the holder of another pilot licence issued in terms of Part 61; and
 - (g) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue a CPL (Aeroplane), if he or she is satisfied that the applicant complies with the requirements referred to in regulation 61.05.1.
- (4) A CPL (Aeroplane) must be issued in the appropriate format, as prescribed by the Director.
- (5) The holder of a CPL (Aeroplane) must, upon receipt of the CPL (Aeroplane), immediately affix his or her signature thereon in ink in the space provided for such purpose.

Theoretical knowledge examination for CPL (Aeroplane)

61.05.3 The applicant must undergo the skills test referred to in regulation 61.05.1 within 36 months from the date of gaining a pass from all the required examination papers referred to in regulation 61.05.1.

Skills test for CPL (Aeroplane)

- **61.05.4** (1) An applicant must undergo the skills test for a CPL (Aeroplane), referred to in paragraph (g) of regulation 61.05.1(1), within 30 days of the last period of dual instruction.
- (2) An applicant must have demonstrated to a DFE I or II the ability to perform as PIC of an aeroplane, the procedures and manoeuvres as prescribed in Document SA-CATS 61, with a degree of competence appropriate to the privileges granted to the holder of a CPL (Aeroplane).
- (3) The initial skills test must be undertaken in a complex aeroplane with retractable undercarriage and variable pitch propeller or turbojet engine.

(4) The holder of a CPL (Aeroplane) who has not flown a minimum of 3 hours as either PIC or PICUS or 6 hours as co-pilot in the 6 months preceding a revalidation check, shall undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a CPL (Aeroplane), and meet the recency requirements to act as PIC.

Privileges and limitations of CPL (Aeroplane)

- **61.05.5** (1) The holder of a CPL (Aeroplane) may not exercise the privileges of that licence unless he or she
 - (a) is in possession of a valid Class 1 medical certificate, issued to him or her in terms of Part 67;
 - (b) has submitted a copy of the medical certificate to the licensing authority, as required in regulation 61.01.6(6) in the event that the aviation medical examiner is unable to submit electronic data to the Director; and
 - (c) complies with the Maintenance of Competency requirements.
- (2) The holder of a valid CPL (Aeroplane) may, in VMC, act as PIC or co-pilot in any aeroplane for which he or she holds the appropriate valid class rating or type rating.
- (3) To provide for special VFR, the holder of a CPL (Aeroplane) may fly in IMC, in sight of the surface and clear of cloud, fog or mist within a control zone, after being authorised to do so by the responsible air traffic services controller.
- (4) If the holder of a CPL (Aeroplane) has the appropriate valid rating, he or she may furthermore exercise the privileges of the licence for any of the special purposes referred to in regulation 61.05.8.
- (5) The holder of a CPL (Aeroplane) may exercise the following privileges in any aeroplane for which he or she holds the appropriate class or type rating, endorsed in the crew member's logbook or licence
 - (a) exercise all the privileges of a PPL (Aeroplane);
 - (b) in operations other than the carrying of passengers or freight for reward, act as PIC in any aeroplane;
 - (c) act as PIC in commercial air transport operations in any aeroplane certified for single-pilot operation;
 - (d) act as co-pilot in commercial air transport operations in any aeroplane required by certification to be operated with a minimum of 2 pilots;
 - (e) act as safety pilot; and
 - (f) exercise all the privileges referred to in paragraphs (a) to (e) by night.

Period of validity of a CPL (Aeroplane)

- **61.05.6** A CPL (Aeroplane) issued is valid for a period of 10 years provided that
 - (a) currency fees are paid in terms of regulation 61.01.16;
 - (b) competency is maintained in terms of regulation 61.05.7;

(c) annually, together with the fee referred to in paragraph (a), the completed application form as prescribed in regulation 61.05.2 (2) is submitted including certified copies of the last 3 pages of the logbook containing entries indicating a record of flight times, an annual summary indicating flight time per category, class, type and total time, as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Maintenance of competency for a CPL (Aeroplane)

- **61.05.7** (1) A CPL (Aeroplane) shall undergo a revalidation check within 12 months from the date of initial issue and thereafter within a period of 24 months calculated from
 - (a) the date of re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the maintenance of competency if such maintenance of competency is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such maintenance of competency if revalidated prior to the period referred to in sub-paragraph (i).
- (2) The holder of a CPL (Aeroplane) who has not maintained competency by passing a revalidation check or an initial licence skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence shall comply with the following requirements:
 - (a) in the case of a holder of a CPL where the maintenance of competency has lapsed by not more than 36 months, the licence holder shall be required to:
 - (i) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a CPL (Aeroplane), and meet the recency requirements to act as PIC; and
 - (ii) pass a revalidation check in the same category of aircraft;
 - (b) in the case of a holder of a CPL where the maintenance of competency has lapsed by more than 36 months, but not more than 60 months, the licence holder shall be required to:
 - (i) rewrite the Air Law examination;
 - (ii) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a CPL (Aeroplane), and meet the recency requirements to act as PIC; and
 - (iii) pass an initial licence skills test in the same category of aircraft. .
 - (c) in the case of a holder of a CPL where the maintenance of competency has lapsed by more than 60 months, comply with the initial issue requirements of Subpart 61.05.
- (4) In the event of the Maintenance of Competency requirements of a CPL (Aeroplane) not being complied with, the holder of a CPL (Aeroplane) may automatically continue to exercise

the privileges of a PPL (Aeroplane), subject to the requirements of the respective licence having been met.

Ratings for special purposes for a CPL (Aeroplane)

- **61.05.8** (1) The ratings for special purposes associated with a CPL (Aeroplane) are
 - (a) instrument rating;
 - (b) flight instructor rating (aeroplane);
 - (c) test pilot rating;
 - (d) tug pilot rating;
 - (e) agricultural pilot rating;
 - (f) aerobatics rating; and
 - (g) tow rating.
- (2) An application for any rating referred to in sub-regulation (1) must be made in accordance with the regulations contained in Subparts 11, 12, 13, 19, 20, 21, 25 and 27, as the case may be.

Recency requirements for a CPL (Aeroplane)

61.05.9 (1) The holder of a CPL (Aeroplane) shall comply with the recency requirements of regulation 91.02.4.

SUBPART 6: COMMERCIAL PILOT LICENCE (HELICOPTER)

Requirements for CPL (Helicopter)

- **61.06.1** (1) An applicant for a CPL (Helicopter) must
 - (a) be 18 years or older;
 - (b) hold a valid Class 1 medical certificate, issued in terms of Part 67;
 - (c) hold at least a valid general certificate of proficiency in radiotelephony (aeronautical):
 - (d) produce evidence of holding or having held, within the previous 60 months, one of the following:
 - (i) a South African PPL (Aeroplane);
 - (ii) a pilot licence (aeroplane) issued by a Contracting State;
 - (iii) a SPL where the applicant has completed an integrated training course approved by the Authority;
 - (e) have successfully completed the training as prescribed in Document 61 at an approved Part 141 ATO;
 - (f) have passed the theoretical knowledge examination as prescribed in Document SA-CATS 61; and
- (2) An applicant for a CPL (Helicopter) must have completed not less than -

- (a) 200 hours of flight time, which may include 20 hours of flight instruction time in a helicopter FSTD approved by the Director for the purpose; or
- (b) 150 hours of flight time, which may include 30 hours of flight instruction time in a helicopter FSTD, approved for the purpose, if he or she has successfully completed the relevant integrated training referred to in regulation 61.01.16.
- (3) The total of 200 hours or 150 hours, as the case may be, referred to in sub-regulation (2), must include
 - (a) 100 hours as PIC, or 70 hours as PIC in the case of an applicant who has undergone the relevant integrated training; and
 - (b) 20 hours of cross-country flight time as PIC, including one flight of not less than 150 NM, in the course of which full-stop landings at not less than two different points away from base shall have been made.
- (4) A South African Air Force pilot or navigator may apply for exemption for some or all of these requirements as indicated in regulation 61.01.9(23).

Application for and issue of CPL (Helicopter)

- **61.06.2** (1) An application for a CPL (Helicopter) must be made to the Director on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulation (1) must be accompanied by
 - (a) a valid Class 1 medical certificate, issued in terms of Part 67;
 - (b) documentary evidence of compliance with paragraph (d) of sub-regulation 61.06.1(1);
 - (c) the original documentation or certified copies of the documents proving that the applicant has passed the theoretical knowledge examination referred to in paragraph (f) of regulation 61.06.1(1) and regulation 61.01.10;
 - (d) the applicant's flying logbook summarised in the format as prescribed in the Document SA-CATS 61;
 - (e) the skills test report as prescribed in Document SA-CATS 61;
 - (f) two recent passport-size photographs of the applicant, unless such applicant is the holder of another pilot licence issued in terms of Part 61; and
 - (g) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue a CPL (Helicopter), if he or she is satisfied that the applicant complies with the requirements referred to in regulation 61.06.1.
- (4) A CPL (Helicopter) must be issued in the appropriate prescribed form.
- (5) The holder of a CPL (Helicopter) must, upon receipt of the CPL (Helicopter), immediately affix his or her signature thereon in ink in the space provided for such purpose.

Theoretical knowledge examination for CPL (Helicopter)

61.06.3 The applicant must undergo the skills test referred to in regulation 61.06.1 within 36 months from the date of gaining a pass from all the required examination papers referred to in regulation 61.06.1.

Skills test for CPL (Helicopter)

- **61.06.4** (1) An applicant for a CPL (Helicopter) must undergo the skills test for a CPL (Helicopter) referred to in paragraph (g) of sub-regulation 61.06.1(1) within 30 days of the last period of dual instruction.
- (2) The applicant must have demonstrated to a DFE I or II the ability to perform as PIC of a helicopter, the procedures and manoeuvres as prescribed in Document SA-CATS 61, with a degree of competence appropriate to the privileges granted to the holder of a CPL (Helicopter).
- (3) The initial skills test must be undertaken in a helicopter of not less than 500 kg MCM.
- (4) The holder of a CPL (Helicopter) who has not flown a minimum of 3 hours as either PIC or (PICUS), or 6 hours as co-pilot in the 6 months preceding a revalidation check, shall undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a CPL (Helicopter), and meet the recency requirements to act as PIC.

Privileges and limitations of CPL (Helicopter)

- **61.06.5** (1) The holder of a CPL (Helicopter) may not exercise the privileges of that licence unless he or she
 - (a) is in possession of a valid Class 1 medical certificate, issued to him or her in terms of Part 67;
 - (b) has submitted a copy of the medical certificate to the licensing authority, as required in regulation 61.01.6(6) in the event that the aviation medical examiner is unable to submit electronic data to the Director;
 - (c) complies with the Maintenance of Competency requirements.
- (2) The holder of a valid CPL (Helicopter) may, by day under VMC, act as PIC or co-pilot of any helicopter for which he or she holds the appropriate valid type rating.
- (3) To provide for special VFR, the holder of a CPL (Helicopter) may fly in IMC, in sight of the surface and clear of cloud, fog or mist within a control zone, after being authorised to do so by the responsible air traffic services controller.
- (4) If the holder of a CPL (Helicopter) has the appropriate valid rating, he or she may furthermore exercise the privileges of the licence for any of the special purposes referred to in regulation 61.06.7.

- (5) The holder of a CPL (Helicopter) may exercise the following privileges in any helicopter for which he or she holds the appropriate type rating, endorsed in the crew member's logbook and licence
 - (a) all the privileges of a PPL (Helicopter);
 - (b) in operations other than the carrying of passengers or freight for reward, act as PIC in any helicopter;
 - (c) act as PIC in commercial air transport operations in any helicopter certified for single-pilot operation; and
 - (d) act as co-pilot in commercial air transport operations in any helicopter required to be operated with a co-pilot;
 - (e) act as safety pilot.

Maintenance of Competency for CPL (Helicopter)

- **61.06.6** (1) The holder of a CPL (Helicopter) shall undergo a revalidation check within 12 months from the date of initial issue and thereafter within a period of 24 months calculated from
 - (a) the date of re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the maintenance of competency if such maintenance of competency is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such maintenance of competency if revalidated prior to the period referred to in sub-paragraph (i).
- (2) The holder of a CPL (Helicopter) who has not maintained competency by passing a revalidation check or an initial licence skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence shall comply with the following requirements:
 - in the case of a holder of a CPL where the maintenance of competency has lapsed by not more than 36 months, the licence holder shall be required to:
 - (i) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a CPL (Helicopter), and meet the recency requirements to act as PIC; and
 - (ii) pass a revalidation check in the same category of aircraft.
 - (b) in the case of a holder of a CPL where the maintenance of competency has lapsed by more than 36 months, but not more than 60 months, the licence holder shall be required to:
 - (i) rewrite the Air Law examination;

- (ii) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a CPL (Helicopter), and meet the recency requirements to act as PIC; and
- (iii) pass an initial licence skills test in the same category of aircraft;
- (c) in the case of a holder of a CPL where the maintenance of competency has lapsed by more than 60 months, comply with the initial issue requirements of Subpart 61.06.
- (3) In the event of the Maintenance of Competency requirements of a CPL (Helicopter) not being complied with, the holder of a CPL (Helicopter) may automatically continue to exercise the privileges of a PPL (Helicopter), subject to the requirements of the respective licence having been met.

Ratings for special purposes for CPL (Helicopter)

- **61.06.7** (1) The ratings for special purposes associated with a CPL (Helicopter) are
 - (a) night rating;
 - (b) instrument rating;
 - (c) flight instructor rating (helicopter);
 - (d) test pilot rating;
 - (e) agricultural pilot rating;
 - (f) helicopter sling load rating;
 - (g) helicopter winching rating; and
 - (h) helicopter game or livestock cull rating.
- (2) An application for any rating referred to in sub-regulation (1) must be made in accordance with the regulations contained in Subparts 10, 11, 15, 16, 18, 19, 22, 23, 24 and 25, as the case may be.

Recency requirements for CPL (Helicopter)

61.06.8 (1) The holder of a CPL (Helicopter) shall comply with the recency requirements of regulation 91.02.4.

SUBPART 7: AIRLINE TRANSPORT PILOT LICENCE (AEROPLANE)

Requirements for ATPL (Aeroplane)

- **61.07.1** (1) An applicant for an ATPL (Aeroplane) must
 - (a) be not less than 21 years of age;
 - (b) hold a valid Class 1 medical certificate, issued in terms of Part 67;
 - (c) produce evidence of holding or having held, within the previous 60 months, an Instrument Rating and one of the following –

- (i) a South African Private or CPL (Aeroplane); or
- (ii) a pilot licence (aeroplane) issued by a Contracting State; or
- (iii) a SPL where the applicant has completed an integrated training course approved by the Authority; and
- (d) have, within the previous 60 months, completed a multi-crew cooperation course;
- (e) have successfully completed the training as prescribed in Document 61 at an approved Part 141 ATO;
- (f) have passed the theoretical knowledge examination as prescribed in Document SA-CATS 61.
- (g) have passed the skills test referred to in regulation 61.07.4.
- (2) An applicant for an ATPL (Aeroplane) must have completed, in aeroplanes, not less than 1500 hours of flight time of which
 - (a) 500 hours must be PICUS; or
 - (b) 250 hours must be as PIC, of which up to 150 hours may be PICUS; and
 - (c) 200 hours must be cross-country flight time, of which 100 hours may be as co-pilot or PICUS;
 - (d) 75 hours must be instrument time, of which not more than 30 hours may be acquired in a FSTD approved for the purpose; and
 - (e) 100 hours shall be night flight time as PIC or as co-pilot.
- (4) The 1 500 hours flying experience referred to in sub-regulation (2) may comprise flight time in any of the following capacities:
 - (a) As PIC, counted in full;
 - (b) As pilot under instruction (dual), counted in full;
 - (c) As co-pilot performing under the supervision of the PIC the functions and duties of the PIC, counted in full up to a maximum of 500 hours, provided both pilots have completed multi-crew cooperation training;
 - (d) As an appropriately rated co-pilot, counted in full;
 - (e) As student pilot-in-command and as student PICUS up to a maximum of 50 hours towards the PIC time required for the issue of an ATPL (Aeroplane), counted in full, provided that the Part 141 ATO has been authorised by the Director to allow the logging of student PICUS flight time;
 - (f) A maximum of 100 hours may have been completed in an FSTD of which a maximum of 25 hours may have been completed in a flight procedures trainer 1 (FNPT 1), or, where the training is provided in an integrated training course, 40 hours in an FNPT II, which may include 10 hours in an FNPT 1;
 - (g) Up to 50 percent of the 1 500 hours and each of the requirements specified in sub-regulations (2) (a), (b), (c) (d) and (e) above may be completed in helicopters;
 - (h) A maximum of 30 hours flight time in touring motor gliders, gliders, micro light aircraft (excluding a weight-shift micro light aeroplane, or an aeroplane with a maximum take-off mass of less than 450 kg), may be counted towards the 1 500 hours experience requirement.

(5) A South African Air Force pilot flight instructor or navigator instructor may apply for exemption for some or all of these requirements as indicated in regulation 61.01.9(23).

Application for and issue of ATPL (Aeroplane)

- **61.07.2** (1) An application for an ATPL (Aeroplane) must be made to the Director on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulations (1) must be accompanied by
 - (a) a valid Class 1 medical certificate, issued in terms of Part 67;
 - (b) documentary evidence of compliance with paragraphs (d) and (e) of regulation 61.07.1 (1);
 - (c) the original documentation or certified copies of the documents proving that the applicant has passed the theoretical knowledge examination referred to in paragraph (f) of regulation 61.07.1(1) and regulation 61.01.10;
 - (d) the applicant's flying logbook summarised in the format as prescribed in Document SA-CATS 61:
 - (e) the skills test report as prescribed in Document SA-CATS 61;
 - (f) two recent passport-size photographs of the applicant, unless such applicant is the holder of another pilot licence issued in terms of Part 61; and
 - (g) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue an ATPL (Aeroplane), if he or she is satisfied that the applicant complies with the requirements referred to in regulation 61.07.1.
- (4) An ATPL (Aeroplane) must be issued in the appropriate prescribed form, as by the Director.
- (5) The holder of an ATPL (Aeroplane) must, upon receipt of the ATPL (Aeroplane), immediately affix his or her signature thereon in ink in the space provided for such purpose.

Theoretical knowledge examination for ATPL (Aeroplane)

- **61.07.3** (1) Candidates who obtain credit or a pass for the ATPL (Aeroplane) (ATPL/A) subjects have 36 months to obtain an Instrument Rating (IR). The ATPL/A subjects will remain valid for a period of 60 months from the date of expiry of the last Instrument Flying Revalidation Check.
- (2) Candidates who obtained a pass at ATPL/A level under the provisions of the Air Navigation Regulations of 1976 and who have maintained an Instrument Rating are afforded the same privilege as detailed in sub-paragraph (1) above.
- (3)(a) If an instrument rating is not issued within the 36 months period from the date of passing the last CPL/IR or ATPL examination as the case may be, then the Air Law and Procedures examination credit will lapse.

- (b) In the event of the lapse of the credit referred to above, a student shall be required to rewrite and pass the Air Law and Procedures theoretical knowledge examination which will then be valid for an additional 36 months
- (4) Where a candidate has previously passed all ATPL/A theoretical knowledge examinations but was not issued with a CPL/IR within the 36 month period, the amount of credit to be given for the ATPL theoretical knowledge instruction will be at the discretion of the Head of Training of the approved Part 141 ATO.

Skills test for ATPL (Aeroplane)

- **61.07.4** (1) An applicant for the initial issue or revalidation of an ATPL (Aeroplane) must have demonstrated to a DFE I (Aeroplane) (DFE I (A)), the ability to perform as PIC of a multi-engine aeroplane, in an actual or simulated multi-crew and IFR scenario, the procedures and manoeuvres as prescribed in Document SA-CATS-FCL 61, with a degree of competency appropriate to the privileges granted to the holder of an ATPL (Aeroplane).
- (2) The skills test may be performed in a FSTD approved for the purpose and/or in a multiengine aeroplane with fully functioning dual controls, and all instrumentation required for the test in a serviceable condition.
- (3) During the skills test the examiner may play the role of a co-pilot, or in the case of a FSTD, be an observer where two pilots occupy the pilot seats.
- (4) The applicant may operate from either pilot seat in aeroplanes with suitable instrumentation but should perform the duties of the pilot flying. The test aspect (Taxiing procedures) may be omitted if the applicant operates from the right seat in an aeroplane which can only be taxied from the left seat.
- (5) The skills test may serve as a skills test for the issue of the licence and an initial type rating for the aeroplane used in the test.
- (6) The holder of an ATPL (Aeroplane) who has not flown a minimum of 3 hours as either PIC or PICUS, or 6 hours as co-pilot in the 6 months preceding a revalidation check, shall undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a ATPL (Aeroplane), and meet the recency requirements to act as PIC.

Privileges and limitations of ATPL (Aeroplane)

- **61.07.5** (1) The holder of an ATPL (Aeroplane) may not exercise the privileges of that licence unless he or she
 - (a) is in possession of a valid Class 1 medical certificate, issued to him or her in terms of Part 67:

- (b) has submitted a copy of the medical certificate to the licensing authority, as required in sub-regulation 61.01.6(6) in the event that the aviation medical examiner is unable to submit electronic data to the Director:
- (c) complies with the maintenance of competency requirements.
- (2) The holder of an ATPL (Aeroplane) may, in any aeroplane for which he or she holds the appropriate type or class rating and subject to regulation 61.07.7,
 - (a) exercise all the privileges of a PPL and CPL (Aeroplane); and
 - (b) act as PIC in commercial air transport operations.
- (3) The holder of an ATPL (Aeroplane) may not exercise any of the privileges of his or her licence unless such holder has undergone, at any time during the preceding 12 months, a skills test for the issue of a type rating or an ATPL (Aeroplane) revalidation check.
- (4) Any limitation of privileges must be endorsed on the licence.

Period of validity of ATPL (Aeroplane)

61.07.6 An ATPL (Aeroplane) issued is valid for a period of 10 years provided that –

- (a) currency fees are paid in terms of regulation 61.01.17;
- (b) competency is maintained in terms of regulation 61.07.7;
- (c) annually, with the fee referred to in paragraph (a), the completed application form, as prescribed in regulation 61.07.2(2), is submitted including certified copies of the last 3 pages of the logbook containing entries indicating a record of flight times, an annual summary indicating flight time per category, class, type and total time, as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Maintenance of competency for ATPL (Aeroplane)

- **61.07.7** (1) The holder of an ATPL (Aeroplane) shall undergo a revalidation check within a period of 12 months calculated from
 - (a) the date of re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the maintenance of competency if such maintenance of competency is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such maintenance of competency if revalidated prior to the period referred to in sub-paragraph (i).
- (2) The holder of an ATPL (Aeroplane) who has not maintained competency by passing a revalidation check or an initial licence skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence shall comply with the following requirements:
 - (a) in the case of a holder of an ATPL where the maintenance of competency has lapsed by not more than 36 months, the licence holder shall be required to:

- (i) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of an ATPL (Aeroplane), and meet the recency requirements to act as PIC; and
- (ii) pass a revalidation check in the same category of aircraft;
- (b) in the case of a holder of an ATPL where the maintenance of competency has lapsed by more than 36 months, but not more than 60 months, the licence holder shall be required to:
 - (i) rewrite the Air Law and Procedures examination;
 - (ii) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of an ATPL (Aeroplane), and meet the recency requirements to act as PIC; and
 - (iii) pass an initial licence skills test in the same category of aircraft;
- (c) in the case of a holder of an ATPL where the maintenance of competency has lapsed by more than 60 months, comply with the initial issue requirements of Subpart 61.07.
- (3) (a) In the event of the maintenance of competency requirements of an ATPL (Aeroplane) not being complied with, the holder of an ATPL (Aeroplane) may automatically continue to exercise the privileges of a VFR CPL.
- (b) This privilege may be exercised for a maximum period of 12 months from the date of expiry of the maintenance of competency of the ATPL (Aeroplane), provided that the holder has a valid Class I or Class II medical certificate issued in terms of Part 67.

Ratings for special purposes for ATPL (Aeroplane)

- **61.07.8** (1) The ratings for special purposes associated with an ATPL (Aeroplane) are
 - (a) flight instructor rating (aeroplane);
 - (b) test pilot rating;
 - (c) tug pilot rating;
 - (d) agricultural pilot rating;
 - (e) aerobatics rating; and
 - (f) tow rating.
- (2) An application for any rating referred to in sub-regulation (1) must be made in accordance with the regulations contained in Subparts 11, 12, 13, 19, 20, 21, 25 and 27, as the case may be.

Recency requirements for ATPL (Aeroplane)

61.07.9 (1)The holder of an ATPL (Aeroplane) shall comply with the recency requirements of regulation 91.02.4.

SUBPART 8: AIRLINE TRANSPORT PILOT LICENCE (HELICOPTER)

Requirements for ATPL (Helicopter)

- **61.08.1** (1) An applicant for an ATPL (Helicopter) must
 - (a) be not less than 21 years of age;
 - (b) hold a valid Class 1 medical certificate, issued in terms of Part 67;
 - (c) produce evidence of holding or having held, within the previous 60 months, a Night Rating and one the following
 - (i) a South African PPL or CPL (Helicopter); or
 - (ii) a pilot licence (Helicopter) issued by a Contracting State; or
 - (iii) a SPL where the applicant has completed an integrated training course approved by the Director;
 - (d) have, within the previous 60 months, completed a multi-crew cooperation course;
 - (e) have successfully completed the training as prescribed in Document 61 at an approved Part 141 ATO;
 - (f) have passed the theoretical knowledge examination as prescribed in Document SA-CATS 61; and
 - (g) have passed the skills test referred to in regulation 61.08.4.
- (2) An applicant for an ATPL (Helicopter) must have completed not less than 1 500 hours of flight time in helicopters, which must include
 - (a) 250 hours as PIC, of which up to 70 hours may be PICUS; and;
 - (b) 200 hours cross-country flight time, of which 100 hours may be as co-pilot or PICUS;
 - (c) 30 hours instrument flight instruction time, of which not more than 10 hours may be acquired in a helicopter FSTD approved for the purpose by the Director, during the six months immediately preceding the date of application if he or she is not the holder of an instrument rating; and
 - (d) 50 hours night flight time as PIC or as co-pilot.
- (3) The 1 500 hours flying experience prescribed in sub-regulation (2) may comprise flight time in any of the following capacities:
 - (a) As PIC, counted in full;
 - (b) As pilot under instruction (dual), counted in full;
 - (c) As co-pilot performing under the supervision of the PIC the functions and duties of the PIC, counted in full;
 - (d) As co-pilot, counted in full;
 - (e) As student pilot-in-command, counted in full up to a maximum of 30 hours towards the PIC time required for the issue of an ATPL (Helicopter); and
 - (f) A maximum of 100 hours may have been completed in a approved FSTD of which a maximum of 25 hours may have been completed in a flight navigation procedures trainer (FNPT);

- (4) Up to 50 percent of the 1 500 hours may be completed in aeroplanes.
- (5) A South African Air Force pilot flight instructor or navigator instructor may apply for exemption for some or all of these requirements as indicated in regulation 61.01.9(23).

Application for and issue of ATPL (Helicopter)

- **61.08.2** (1) An application for an ATPL (Helicopter) must be made to the Director on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulation (1) must be accompanied by -
 - (a) a valid Class 1 medical certificate, issued in terms of Part 67;
 - (b) documentary evidence of compliance with paragraphs (d) and (e) of subregulation 61.08.1(1);
 - (c) the original documentation or certified copies of the documents proving that the applicant has passed the theoretical knowledge examination referred to in paragraph (f) of regulation 61.08.1(1) and regulation 61.01.10;
 - (d) the applicant's flying logbook summarised in the format as prescribed in the Document SA-CATS 61;
 - (e) the skills test report as prescribed in Document SA-CATS 61;
 - (f) two recent passport-size photographs of the applicant, unless such applicant is the holder of another pilot licence issued in terms of Part 61; and
 - (g) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue an ATPL (Helicopter), if he or she is satisfied that the applicant complies with the requirements referred to in regulation 61.08.1.
- (4) An ATPL (Helicopter) must be issued in the appropriate prescribed form.
- (5) The holder of an ATPL (Helicopter) must, upon receipt of the ATPL (Helicopter), immediately affix his or her signature thereon in ink in the space provided for such purpose.

Theoretical knowledge examination for ATPL (Helicopter)

- **61.08.3** (1) Candidates who obtain credit or a pass for the ATPL subjects and who wish to be issued with an Instrument Rating on helicopters) have 36 months to obtain the Instrument Rating. The relevant ATPL subjects will remain valid for a period of 60 months from the date of expiry of the last Instrument Flying Revalidation Check.
- (2) Candidates who obtained a pass at ATPL level under the provisions of the Air Navigation Regulations of 1976 and who have maintained an Instrument Rating are afforded the same privilege as detailed in sub-regulation (1) above.
- (3) If a Instrument Rating is not issued within the 36 month period from the date of passing the last CPL/IR or ATPL examination, as the case may be, then the candidates will be required to re-take the Air Law and Procedures theoretical knowledge examination

(4) Where a candidate has previously passed all ATPL theoretical knowledge examinations but was not issued with a CPL within the 36 month period, the amount of credit to be given for the ATPL theoretical knowledge instruction will be at the discretion of the Head of Training of the approved Part 141 ATO.

Skills test for ATPL (Helicopter)

- **61.08.4** (1) An applicant for the initial issue or revalidation of an ATPL (Helicopter) must have demonstrated to a DFE (Helicopter), the ability to perform as PIC of a helicopter, in an actual or simulated multi-crew scenario, the procedures and manoeuvres as prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of an ATPL (Helicopter).
- (2) The skills test may be performed in a FSTD approved for the purpose and/or in a helicopter suitable for multi-crew simulation and configurable with fully functional dual controls, and all instrumentation required for the test in a serviceable condition.
- (3) During the skills test the examiner may play the role of a co-pilot, or in the case of a FSTD, be an observer where two pilots occupy the pilot seats.
- (4) The holder of an ATPL (Helicopter) who has not flown a minimum of 3 hours as either PIC or PICUS or 6 hours as co-pilot in the 6 months preceding a revalidation check, shall undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a ATPL (Helicopter), and meet the recency requirements to act as PIC.

Privileges and limitations of ATPL (Helicopter)

- **61.08.5** (1) The holder of an ATPL (Helicopter) may not exercise the privileges of that licence unless he or she
 - (a) is in possession of a valid Class 1 medical certificate, issued to him or her in terms of Part 67:
 - (b) has submitted a copy of the medical certificate to the Director, as required in regulation 61.01.6(6) in the event that the aviation medical examiner is unable to submit electronic data to the Director:
 - (c) complies with the Maintenance of Competency requirements.
- (2) The holder of an ATPL (Helicopter) may, in any helicopter for which he or she holds the appropriate type rating and subject to regulation 61.08.7
 - (a) exercise all the privileges of a PPL or CPL (Helicopter); and
 - (b) act as PIC in commercial air transport operations.

- (3) The holder of an ATPL (Helicopter) may not exercise any of the privileges of his or her licence unless such holder has undergone, at any time during the preceding 12 months, a skills test for the issue of a type rating or an ATPL (Helicopter) revalidation check.
- (4) Any limitation of privileges must be endorsed on the licence.

Period of validity of ATPL (Helicopter)

- **61.08.6** An ATPL (Helicopter) issued is valid for a period of 10 years provided that
 - (a) currency fees are paid in terms of regulation 61.01.17;
 - (b) competency is maintained in terms of regulation 61.08.7;
 - (c) annually, together with the fee referred to in paragraph (a), the completed application form as prescribed in regulation 61.08.2(2) is submitted including certified copies of the last 3 pages of the logbook containing entries indicating a record of flight times, an annual summary indicating flight time per category, class, type and total time, as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Maintenance of competency for ATPL (Helicopter)

- **61.08.7** (1) The holder of an ATPL (Helicopter) shall undergo a revalidation check within a period of 12 months calculated from
 - (a) the date of re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the maintenance of competency if such maintenance of competency is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such maintenance of competency if revalidated prior to the period referred to in sub-paragraph (i).
- (2) The holder of an ATPL (Helicopter) who has not maintained competency by passing a revalidation check or an initial licence skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence shall comply with the following requirements:
 - (a) in the case of a holder of an ATPL where the maintenance of competency has lapsed by not more than 36 months, the licence holder shall be required to:
 - (i) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of an ATPL (Helicopter), and meet the recency requirements to act as PIC; and
 - (ii) pass a revalidation check in the same category of aircraft;
 - (b) in the case of a holder of an ATPL where the maintenance of competency has lapsed by more than 36 months, but not more than 60 months, the licence holder shall be required to:

- (i) rewrite the Air Law and Procedures or Air Law examination, as applicable;
- (ii) undergo sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of an ATPL (Helicopter), and meet the recency requirements to act as PIC; and
- (iii) pass an initial licence skills test in the same category of aircraft;
- (c) in the case of a holder of an ATPL where the maintenance of competency has lapsed by more than 60 months, comply with the initial issue requirements of Subpart 61.08.
- (3) (a) In the event of the maintenance of competency requirements of an ATPL (Helicopter) not being complied with, the holder of an ATPL (Helicopter) may automatically continue to exercise the privileges of a VFR CPL.
- (b) This privilege may be exercised for a maximum period of 12 months from the date of expiry of the maintenance of competency of the ATPL (Helicopter), provided that the holder has a valid Class I or Class II medical certificate issued in terms of Part 67.

Ratings for special purposes for ATPL (Helicopter)

- **61.08.8** (1) The ratings for special purposes associated with an ATPL (Helicopter) are
 - (a) instrument rating;
 - (b) flight instructor rating (helicopter);
 - (c) test pilot rating;
 - (d) agricultural pilot rating;
 - (e) helicopter sling load rating:
 - (f) helicopter winching rating; and
 - (g) helicopter game or livestock cull rating.
- (2) An application for any rating referred to in sub-regulation (1) must be made in accordance with the regulations contained in Subparts 11, 15, 16, 17, 19, 22, 23, 24 and 25, as the case may be.

Recency requirements for ATPL (Helicopter)

61.08.9 (1) The holder of an ATPL (Helicopter) shall comply with the recency requirements of regulation 91.02.4.

SUBPART 9: CLASS AND TYPE RATINGS

Requirements for issue of class and type ratings

61.09.1 (1) This Subpart applies to the issuing, revalidating and re-issuing of South African pilot class and type ratings and warbird type rating; the privileges and limitations of such class and type ratings and warbird type endorsements; and matters related thereto.

- (2) An aircraft class rating is required in order to pilot all types of aircraft within a particular aircraft class.
- (3) A class rating is required for all single-pilot aircraft, except for those falling outside the classes defined in regulation 61.09.8(1), or as designated in terms of regulation 61.01.3 as requiring a type rating.
- (4) An aircraft type rating is required in order to pilot a type of aircraft that is not included within any of the aircraft classes set out in regulation 61.09.8(1).
- (5) A type rating is required for all multi-pilot aircraft, other aircraft and warbirds as indicated in this Subpart.
- (6) Exemptions to this Part may be provided for in Part 94 in respect of the operation of certain non-type certificated aircraft.
- (7) All licence endorsements in respect of aircraft class and type ratings are set out in SA-CATS 61.
- (8)(a)Even if an applicant has an entry for a class rating in his or her licence, a change to another system, make and model or variant of the aeroplane within one class rating requires differences or familiarisation training, as indicated in Tables 1-3 of Technical Standard 61.09.7 and such training shall be endorsed in the pilot's logbook.
- (b) The differences/familiarisation training form indicated in Document SA-CATS 61 shall be submitted to the Director within 30 days of completion of the training

Multi-pilot aeroplanes

- (9) An applicant for a type rating in respect of a multi-pilot aeroplane must have
 - (a) at least 100 hours experience as PIC of aeroplanes;
 - (b) successfully completed appropriate training referred to in this Subpart;
 - (c) passed appropriate written examinations as prescribed in Document SA-CATS 61; and
 - (d) passed appropriate skills test referred to in this Subpart with an appropriately rated DFE Cat I (Aeroplanes) .

Single-pilot multi-engine aeroplanes

- (10) An applicant for a class or type rating, as the case may be, in respect of a single-pilot multi-engine aeroplane must have
 - (a) at least 70 hours as PIC of aeroplanes;
 - (b) successfully completed appropriate training referred to this Subpart;

- (c) passed appropriate written examinations as prescribed in Document SA-CATS 61; and
- (d) passed appropriate skills test referred to in this Subpart.

Multi-pilot helicopters

- (11) An applicant for a type rating in respect of a multi-pilot helicopter must have
 - (a) at least 100 hours as PIC of helicopters;
 - (b) successfully completed appropriate training referred to in this Subpart;
 - (c) passed the appropriate written examinations as prescribed in Document SA-CATS 61; and
 - (d) passed appropriate skills test referred to in this Subpart.

Single-pilot helicopters

- (12) An applicant for a type rating in respect of a single-pilot helicopter must have
 - (a) at least 25 hours flight time on helicopters of which a minimum of 3 hours shall be as PIC of helicopters;
 - (b) successfully completed appropriate training referred to in this Subpart;
 - (c) passed the appropriate written examinations as prescribed in Document SA-CATS 61; and
 - (d) passed appropriate skills test referred to in this Subpart.

Warbird type aircraft

- (13) An applicant for a type rating in respect of a warbird type aircraft must
 - (a) hold the category and class rating for the relevant aircraft;
 - (b) have successfully completed appropriate training referred to in this Subpart;
 - (c) have passed the appropriate written examinations as prescribed in Document SA-CATS 61; and
 - (d) have passed appropriate skills test referred to in this Subpart.

Training

- **61.09.2** (1) An applicant for a class or type rating must have successfully completed the appropriate training as prescribed in Document SA-CATS 61.
- (2) In the case of training for a single-pilot multi-engine class rating, or the applicant's first single-pilot multi-engine type rating, the training must consist of at least
 - (a) 7 hours of theoretical knowledge instruction in multi-engine aeroplane operation; and
 - (b) 6 hours dual flight training in multi-engine aeroplane operation, including not less than 2 hours 30 minutes dual flight training under normal conditions and at least 3 hours 30 minutes dual flight training in engine failure procedures and asymmetric

flight. At most 3 hours of the dual flight training may be acquired in an approved FSTD.

- (3) An applicant for a type or class rating on a high performance single pilot aeroplane who is not the holder of an ATPL, or who has not obtained credit for the ATPL theoretical knowledge examinations, must undergo additional training as set out in Document SA-CATS 61.
- (4) An applicant for a warbird type rating
 - (a) who is the holder of an ATPL with applicable military type experience may be endorsed with the applicable warbird type rating.
 - (b) who is the holder of an ATPL without applicable military type experience must undergo training as described in Document SA-CATS 61 for endorsement of the warbird type rating contemplated.
 - (c) who is the holder of all ATPL theoretical knowledge credits and has applicable military type experience may be endorsed with the applicable warbird type rating.
 - (d) who is the holder of all ATPL theoretical knowledge credits but who does not have applicable military type experience, must undergo training as described in Document SA-CATS 61 for endorsement of the warbird type rating contemplated.
- (5) Pilots operating in terms of Parts 91, 94, 96, 121, 127, 135 and 138, who are operating aircraft which require two or more pilots for the operation, must undergo a multi-crew cooperation training course detailed in Document SA-CATS 61.

Skills test

- **61.09.3** (1) An applicant for a type rating or multi-engine class rating must have demonstrated to a DFE the competence to perform as PIC of the aircraft concerned, the procedures and manoeuvres as described in Document SA-CATS 61.
- (2) An applicant for a single-engine class or touring motor glider class rating must have demonstrated to a DFE, or an appropriately rated flight instructor, the competence to perform as PIC of the aircraft concerned the procedures and manoeuvres as described in Document SA-CATS 61
- (3) An applicant for a warbird type endorsement must have demonstrated to a DFE, or an appropriately rated flight instructor or other pilot authorised in writing by the Director for the purpose, the competence to perform as PIC of the aircraft concerned, the procedures and manoeuvres as described in Document SA-CATS 61.
- (4) The skills test must be completed within 90 days of completion of the written examinations referred to in regulation 61.09.1.

Circumstances in which type or class ratings are required

61.09.4 (1) The holder of a pilot licence may not act in any capacity as a pilot of an aircraft, except as a pilot undergoing skills testing or receiving flight instruction, unless the holder has a valid and appropriate class or type rating.

- (2) The holder of a pilot licence may not act in any capacity as a pilot of a warbird, except as a pilot undergoing skills testing or receiving flight instruction, unless the holder has a valid and appropriate class or type rating applicable to a warbird.
- (3) Any conditions or limitations as determined by the Director must be endorsed on the rating.

Special authorisation for type or class ratings

- **61.09.5** (1) Instead of issuing the class or type rating, the Director may give special authorisation, in writing, for non-revenue special purpose flights, such as aircraft flight testing.
- (2) The special authorisation, referred to in sub-regulation (1), must be limited to the completion of the specific task.

Application for the issuing of a class, type or warbird rating

- **61.09.6** (1) An application for a class, type or warbird rating must be in the appropriate prescribed form within 30 days of the skills test..
- (2) The application must be accompanied by
 - (a) documentary evidence of satisfying the requirements of the relevant provisions of this Subpart; and
 - (b) the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with all the relevant requirements, the Director must issue a class, type or warbird rating in the appropriate prescribed form.
- (4)(a) The DFE or flight instructor must, on satisfactory completion of all the requirements for the issue of a class or type rating, endorse the logbook of the applicant entitling the applicant to exercise the privileges of the rating, as PIC or pilot instructor as the case may be.
- (b) The DFE or flight instructor may place a restriction on the applicant to act as co-pilot or as third pilot as the case may be.
- (c) The Director reserves the right to withdraw the privilege of the rating should any irregularity with respect to the endorsement be found.

Type and class ratings – privileges and variants

- **61.09.7** (1) Subject to the provisions of regulation 61.9.1, the privileges of the holder of a type or class rating are to act as a pilot on the type or class of aircraft specified in the rating.
- (2) If the variant has not been flown within a period of 24 months following the differences training or the date of last having flown the variant, further differences training or a proficiency check in that variant will be required.

- (3) Differences training as detailed in Document SA-CATS 61 require additional knowledge and training on an approved training device or aircraft to convert an applicant onto the type or class of aircraft under consideration.
- (4) The differences training must be endorsed in the pilot's logbook and duly signed by the appropriately rated instructor who conducted the training.
- (5) Familiarisation training requires acquisition of additional knowledge specific to the individual aircraft under consideration and should not require actual or FSTD flight time.

Type and class ratings

- **61.09.8** (1) The class ratings for single-pilot aeroplanes not requiring a type rating are as follows
 - (a) all single-engine piston aeroplanes (land);
 - (b) all single-engine piston aeroplanes (sea);
 - (c) all touring motor gliders;
 - (d) single-engine turbo-prop aeroplanes (land);
 - (e) single-engine turbo-prop aeroplanes (sea);
 - (f) all multi-engine piston aeroplanes (land); and
 - (g) all multi-engine piston aeroplanes (sea).
- (2) The class ratings for aeroplanes must be issued according to the list of classes of aeroplanes shown in Document SA-CATS 61.
- (3) Differences or familiarisation training is required to change to another type or variant of the aeroplane within one class rating.
- (4) Type rating for aeroplanes must be established for
 - (a) each type of multi-pilot aeroplane;
 - (b) each type of single-pilot multi-engine aeroplane fitted with turbo-prop or turbojet engines;
 - (c) each type of single-pilot single-engine aeroplane fitted with a turbojet engine;
 - (d) each type of aeroplane with unconventional handling characteristics that requires additional flying or simulator training.
- (5) Type ratings for aeroplanes must be issued according to the list of types of aeroplanes shown in Document SA-CATS 61.
- (6) Differences or familiarisation training is required in order to change to another variant of the aeroplane within one type rating as described in Document SA-CATS 61.
- (7) Aeroplanes designated as high performance must be listed as such within the relevant class or type rating list using the annotation 'HPA' as described in Document SA-CATS 61.
- (8) Warbird type aircraft are -

- (a) ex-military gas-turbine engine aircraft;
- (b) ex-military piston-engine aircraft having a maximum power of 500 BHP or more; or
- (c) any other ex-military type of aircraft specified by the Director for the purpose of this regulation.
- (9) The Director must establish requirements for the issue of the following class ratings
 - (a) sea-planes;
 - (b) multi-engine centreline-thrust aeroplanes; and
 - (c) single-seat aeroplanes.

Transfer of foreign class and type ratings

- **61.09.9** (1) The Director may transfer to a South African licence a valid class or type rating contained in a licence issued by a Contracting State, provided that the requirements for the ratings that were issued or rendered valid are equal to or above the minimum standards of this Part.
- (2) The holder shall make a written application with sufficient reasons 0 for the transfer of such rating and on approval by the Director, shall have the rating endorsed into the pilot logbook and licence.

Type rating training and testing conducted by an approved Type Rating Training Organisation (TRTO) of a Contracting State

- **61.09.10** (1) A TRTO of a Contracting State may, prior to the training, be approved by the Director for the purpose of conducting Type Rating Training and Testing for holders of a South African Pilot Licence, provided that the training and testing requirements are equal to or above the minimum standards of this Part and as prescribed in Document SA-CATS 61.
- (2) The Director may, on completion of the training and testing conducted by an approved TRTO, add the type rating to a South African licence, provided that the licence holder submits a copy of the type rating endorsement in the pilot's logbook, a copy of the type rating training file and the skills test report completed and signed by the Type Rating Examiner of the Contracting State.

SUBPART 10: NIGHT RATING

Requirements for night rating

- **61.10.1** (1) An applicant for a night rating must
 - (a) hold a valid pilot licence;
 - (b) submit proof of having completed the training referred to in sub-regulation (2) below:

- (c) submit proof of having passed the theoretical examination referred to in subregulation (3) below; and
- (d) have passed the prescribed skills test, referred to in regulation 61.10.4.
- (2) An applicant for a night rating must have completed under the auspices of an approved Part 141 ATO
 - (a) not less than 5 hours of theoretical knowledge instruction on the material as prescribed in Document SA-CATS 61;
 - (b) not less than 10 hours of instrument instruction, of which not more than 5 hours may be accumulated in an approved FSTD;
 - (c) in the case of a night rating on aeroplanes, not less than 5 take-offs and five landings by night as pilot manipulating the controls of the aircraft whilst under dual instruction; or
 - (d) in the case of a night rating on helicopters, not less than 5 circuits with 5 take-offs and five landings by night as pilot manipulating the controls of the aircraft whilst under dual instruction; and
 - (e) a dual cross-country flight by night consisting of at least
 - (i) in the case of a night rating for aeroplanes a total distance of not less than 150 NM in the course of which full-stop landings at two different aerodromes away from base are made; or
 - (ii) in the case of a night rating for helicopters, a total distance of not less than 75 NM in the course of which landings at two different aerodromes away from base are made.
- (3) A maximum of 5 hours instrument time can be credited towards the 10-hour requirement for a helicopter pilot if the applicant is the holder of an instrument or night rating on aeroplanes and vice versa.

Application for night rating

- **61.10.2** (1) An application for a night rating must be made to the Director in the appropriate prescribed form .
- (2) The application must be accompanied by
 - (a) the skills test report as prescribed in Document SA-CATS 61;
 - (b) proof that the applicant meets the requirements of regulation 61.10.1; and
 - (c) the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the appropriate requirements, the Director must issue a night rating in the appropriate prescribed form .
- (4) A night rating is valid as long as the relevant pilot licence of the holder of the rating is valid and the appropriate requirements for the rating are maintained.

Theoretical knowledge examination for night rating

61.10.3 The applicant for a night rating shall have completed a written examination at a Part 141 approved ATO on the theoretical knowledge requirements referred to in paragraph (a) of regulation 61.10.1(2).

Skills test for night rating

- **61.10.4** (1) An applicant for a night rating must have demonstrated to an appropriately rated Grade I or Grade II flight instructor, the procedures and manoeuvres as prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of a night rating.
- (2) The skills test must be conducted in an aircraft of the applicable category, and shall include a minimum of 3 take-offs, 3 circuits and 3 landings by night; the instrument component of the skills test may be conducted by day.
- (3) The applicant must have undergone the skills test within the 30 days immediately preceding the date of application.

Privileges and limitations of night rating

- **61.10.5** (1) The holder of a valid night rating may exercise the privileges of his or her pilot's licence by night.
- (2) Notwithstanding the provisions of sub-regulation (1), the holder of a night rating must, in the case of single-pilot helicopter operations carried out in terms of Part 127, meet additional experience requirements as prescribed by that Part.

SUBPART 11: INSTRUMENT RATING

Requirements for instrument rating

- **61.11.1** (1) An applicant for an instrument rating must
 - (a) hold a valid pilot licence issued in terms of Part 61;
 - (b) hold a valid night rating, unless such rating is an integral part of the pilot licence;
 - (c) hold a valid Class 2 medical certificate issued in terms of Part 67;
 - (d) have successfully completed the appropriate training as prescribed in Document SA-CATS 61 at an approved Part 141 ATO;
 - (e) have passed the theoretical knowledge examination referred to in regulation 61.11.3:
 - (f) have passed the skills test referred to in regulation 61.11.4, in an aircraft or FSTD approved for the purpose; and
 - (g) hold a valid general certificate of proficiency in radiotelephony (aeronautical).

- (2) An applicant for an instrument rating must have completed at least 50 hours cross-country flight time as PIC of an aeroplane, helicopter, powered-lift aircraft or airship, of which at least 10 hours must have been in the category of aircraft for which the instrument rating is sought.
- (3) The applicant must have completed 40 hours instrument flight training under instruction of which, at most, 20 hours may be in an FSTD approved for the purpose.
- (4) In the case of an instrument rating for a multi-engine aeroplane, at least 5 hours of the instrument flight training referred to in sub-regulation (3) shall be conducted in a multi-engine aeroplane and shall be additional to the training towards the initial multi-engine class rating, provided that 3 of the 5 hours may be conducted in an FSTD approved for the purpose.
- (5) In the case of an application for an instrument rating in a category of aircraft other than that for which a valid instrument rating is already held, the applicant must have undergone at least an additional 5 hours of instrument flight instruction in the new category of aircraft prior to the skills test, provided that 3 of the 5 hours may be conducted in an FSTD approved for the purpose

Application for instrument rating

- **61.11.2** (1) An application for an instrument rating must be made to the Director in the appropriate prescribed form, and must be accompanied by the appropriate fee as prescribed in Part 187.
- (2) If the applicant complies with all the prescribed requirements, the Director must issue an instrument rating in the prescribed form .

Theoretical knowledge examination for instrument rating

- **61.11.3** (1) An applicant for an instrument rating must have passed the appropriate written examinations as prescribed in Document SA-CATS 61, provided that the holder of a valid instrument rating applying for an instrument rating in a different category is not required to write the examinations again.
- (2) The Director may, in terms of Part 11, exempt an applicant who is a South African Air Force pilot from writing examination on other subjects except Air Law and Procedures, provided that the applicant holds a valid South African Air Force instrument rating, which has not lapsed for more than 12 months preceding the date of application.

Skills test for instrument rating

61.11.4 (1) An applicant for an instrument rating must demonstrate to a DFE, in a suitable aircraft in the category for which the particular instrument rating is sought, the ability to perform the procedures and manoeuvres pre-scribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of the instrument rating.

- (2) For the applicant seeking an instrument rating in a multi-engine aircraft, the skills test must be conducted in the appropriate class of aircraft.
- (3) Where an applicant has successfully completed the skills test in a multi-engine aircraft, he or she shall be deemed to meet the skills test requirements for a single-engine aircraft of the same category.
- (4) The applicant must undergo the skills test within 36 months of passing the theoretical knowledge examination and within 30 days of the last period of dual instruction.
- (5) Notwithstanding sub-regulations (1) and (2), any elements of the skills test which cannot be safely conducted in the aircraft, or due to unavailability of facilities, may be conducted in a FSTD approved for the purpose.

Privileges and Limitations of Instrument Rating

- **61.11.5** (1) The holder of a valid instrument rating may
 - (a) act, within the limitations of his or her pilot licence and particular instrument rating, as pilot of an aircraft in compliance with IFR and under IMC, by day or by night; and
 - (b) carry out approaches and landings under IMC with the aid of approved approach aids and procedures.
- (2) Whenever the examiner or another pilot functions as a flight crew member during an initial instrument rating skills test, the privileges of the instrument rating shall be restricted to multi-pilot operations only.
- (3) The limitation in sub-regulation (2) may be removed by being tested in a single-pilot aircraft without any assistance from the examiner or another pilot.

Period of validity of instrument rating

61.11.6 An instrument rating is valid for a period of 12 months provided that maintenance of competency requirements for the associated licence in terms of these Regulations are complied with.

Revalidation of instrument rating

- **61.11.7** (1) The period of validity of an instrument rating shall be calculated from
 - (a) the date of issue or re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to the date of expiry; or

- (ii) revalidation of such rating if revalidated prior to the period referred to in sub-paragraph (i).
- (2) To revalidate an instrument rating -
 - (a) if the validation period has not yet lapsed, or has lapsed for a period of 36 months or less, the applicant must pass a revalidation check with a DFE, as prescribed in Document SA-CATS 61, in an aircraft or FSTD approved for the purpose in the appropriate aircraft category;
 - (b) if the validity of the instrument rating has lapsed for more than 36 months the applicant must
 - (i) re-write the Air Law and Procedures theoretical knowledge examinations as listed in Document SA-CATS 61;
 - (ii) acquire, in an aircraft or FSTD approved for the purpose in the appropriate aircraft category, sufficient ground and flight training at an approved ATO, including at least 5 instrument approach procedures and a missed approach, to reach the standard required to pass revalidation check for an instrument rating in the aircraft category; and
 - (iii) within 90 days of having acquired the instrument time, pass a skills test required for an initial instrument rating with a DFE, as prescribed in Document SA-CATS 61, in an aircraft or FSTD approved for the purpose in the appropriate aircraft category.
- (3) Where a pilot holds an instrument rating in the helicopter and aeroplane categories, the revalidation check must be carried out in each category at least once in every 24 months.
- (4) Where a pilot holds an instrument rating for both single-engine and multi-engine aeroplanes, every alternate revalidation of this rating may be carried out in a single-engine aeroplane or in a FSTD approved for the purpose.
- (5) When the holder of an instrument rating passes the proficiency check(s) referred to in sub-regulation (1), the DFE must
 - (a) complete, and submit to the Director, the appropriate prescribed form; and
 - (b) endorse the holder's pilot logbook as prescribed in Document SA-CATS 61.
- (6) Where the holder has failed the revalidation test, the DFE must notify the Director immediately in writing and also inform the holder that the rating has become invalid and that he or she may not exercise the privileges of an instrument rating.

SUBPART 12: GRADE III AEROPLANE FLIGHT INSTRUCTOR RATING

Requirements for Grade III Aeroplane Flight Instructor Rating

61.12.1 (1) An applicant for a Grade III Aeroplane Flight Instructor rating must –

- (a) hold a valid CPL (Aeroplane) or ATPL (Aeroplane);
- (b) have successfully completed at least 20 hours of flight instructor patter training as prescribed in Document SA-CATS 61, conducted by a Grade I or a Grade II Aeroplane Flight Instructor, of which at least 15 hours must be in an aeroplane and 5 hours may be in a FSTD approved for the purpose;
- (c) have passed the theoretical knowledge examination referred to in regulation 61.12.3;
- (d) have successfully completed the appropriate training course as prescribed in Document SA-CATS 61 with a Part 141 approved ATO:
- (e) have successfully undergone the instructor ground evaluation test referred to Document SA-CATS 61; and
- (f) undergo the skills test referred to in regulation 61.12.4 conducted by a DFE within 36 months of completing the instructor theoretical knowledge examinations and within 30 days of successfully completing the instructor ground evaluation referred to in paragraph (e).
- (2) A South African Air Force pilot instructor and navigator instructors may apply for exemption from some or all of the requirements prescribed in sub-regulation (1) as indicated in sub-regulation 61.01.9(23).
- (3) The holder of a flight instructor rating in another category of aircraft may be exempted from attending the theoretical training referred to in paragraph (c) of sub-regulation (1).
- (4) The number of hours referred to in paragraph (b) of sub-regulation (1) may be reduced to 10 hours of flight training in aeroplanes if the applicant is the holder of a flight instructor rating in another category of aircraft.

Application for Grade III Aeroplane Flight Instructor Rating

- **61.12.2** (1) An application for a Grade III Aeroplane Flight Instructor Rating must be made on the appropriate form and in the manner prescribed in Document SA-CATS 61 and submitted to the Director within 30 days of having completed the skills test.
- (2) The application must be accompanied by the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the requirements referred to in regulation 61.12.1, the Director must issue a Grade III Aeroplane Flight Instructor Rating in the appropriate prescribed format.

Theoretical knowledge examination for Grade III Aeroplane Flight Instructor Rating

61.12.3 (1) An applicant for a Grade III Aeroplane Flight Instructor Rating must have passed the appropriate written examination, conducted by the Authority, as prescribed in Document SA-CATS 61.

(2) An applicant, who is the holder of a flight instructor rating in another category of aircraft, shall be exempted from that portion of the theoretical knowledge examinations dealing with matters of a common nature already passed.

Skills test for Grade III Aeroplane Flight Instructor Rating

- **61.12.4** (1) An applicant for a Grade III Aeroplane Flight Instructor Rating must have demonstrated to an appropriately rated DFE the ability to perform as a Grade III Aeroplane Flight Instructor the procedures and manoeuvres prescribed in Document SA-CATS 61 with a degree of competency appropriate to the privileges granted to the holder of a Grade III Aeroplane Flight Instructor Rating.
- (2) The applicant must undergo the skills test within 36 months of passing the appropriate theoretical knowledge examination and within the 30 days immediately preceding the date of application.
- (3) The skills test must be conducted in an aeroplane with a MCM in excess of 450 kg, fitted with fully functional dual controls, or in an approved level D FSTD.
- (4) Before an applicant submits himself or herself for the initial skills test, he or she must provide the examiner with written proof that
 - (a) he or she has satisfactorily completed the required training conducted by an approved Part 141 ATO; and
 - (b) the Grade I or Grade II Aeroplane Flight Instructor who has provided the supervision and training considers the performance of the applicant adequate for the skills test for a Grade III Aeroplane Flight Instructor.
- (5) The applicant shall submit the forms to the Director, within 30 days of having completed the skills test.

Privileges and Limitations of the holder of valid Grade III Flight Instructor Rating (Aeroplane)

- **61.12.5** (1) A Grade III Flight Instructor (Aeroplane) may give ground or flight instruction only under the supervision of the holder of a valid Grade I or Grade II Flight Instructor Rating (Aeroplane).
- (2) A Grade III Flight Instructor (Aeroplane) may, subject to sub-regulations (1) and (3), give instruction as limited by the endorsements in his or her logbook or licence, towards
 - (a) the issue of a SPL;
 - (b) the issue or revalidation of a PPL;
 - (c) familiarisation and differences training;
 - (d) the issue of a night rating;
 - (e) the issue of an instrument rating;
 - (f) the issue of a multi-engine piston class rating;

- (g) the issue of a single-engine turbo-propeller class rating;
- (h) the issue of an aerobatics rating; and
- (i) the issue of a type rating.
- (3) The requirements for the endorsements referred to in sub-regulation (2) are as follows:
 - (a) In all cases the instructor must have
 - (i) the flight instructor endorsement (PI) for the specific aeroplane class, including make and model within a class, and aeroplane type (where a type rating is required) in his or her logbook and licence (as required); or
 - (ii) written authorisation in the case of instruction on a FSTD;
 - (b) In the case of instruction in an aeroplane, the instructor must have demonstrated proficiency in flying the aeroplane from each pilot seat.
 - (c) For each endorsement, all relevant recency requirements must be met before the privileges of that endorsement may be exercised.
 - (d) For the night rating instructor endorsement, the instructor must
 - (i) be the holder of a night rating and show evidence of having completed the training at an approved Part 141 ATO as described in Appendix 13.1, exercises 19 and 20, of SA CATS 61;
 - (ii) have demonstrated to a DFE I or II (A) in the case of an initial Grade III skills test, or the CFI of an approved ATO in the case of an existing Grade III instructor, the ability to
 - (aa) give a suitable night flying briefing;
 - (bb) give instruction in an aeroplane or approved FSTD on instrument flying to the level required for a night rating; and
 - (cc) give flight instruction at night in an aeroplane which must consist of at least three take-offs and three landings;
 - (iii) have his or her logbook endorsed by the DFE or CFI with the words "Authorised to give instruction for night ratings".
 - (e) For the instrument flight instructor endorsement, the instructor must
 - (i) have given not less than 100 hours of instruction in an aeroplane or FSTD;
 - (ii) be the holder of a valid instrument rating appropriate to the aeroplane in which the instrument training is provided;
 - (iii) show evidence of having completed a course at an approved ATO as described in Appendix 13.4 of SA CATS 61, or an equivalent course acceptable to the Director;
 - (iv) have demonstrated to a DFE I or II (A) the ability to give suitable briefings and instruction in instrument flying to the level required for an instrument rating; and
 - (v) have his or her logbook endorsed by the DFE with the words "Authorised to give instruction for instrument ratings".
 - (f) For the multi-engine class rating instructor endorsement, the instructor must –

- (i) have given at least 100 hours of instruction in an aeroplane or FSTD;
- (ii) have accumulated at least 20 hours of flight time as PIC of a multi-engine aeroplane:
- (iii) show evidence of having completed a course at an approved ATO as described in Appendix 13.2 of SA CATS 61, or an equivalent course acceptable to the Director;
- (iv) have accumulated at least 5 hours as pilot-in command in the specific make and model of the multi-engine aeroplane used for training;
- (v) undergo a skills test for the endorsement with a DFE I or II (A); and
- (vi) have his or her logbook endorsed by the DFE with the words: "Authorised to give instruction for multi-engine class ratings".
- (g) For the Single-Engine Turbo-Propeller Class Rating Instructor endorsement, the instructor must
 - (i) have accumulated at least 100 hours of instruction in an aeroplane or FSTD;
 - (ii) have accumulated at least 50 hours of flight time as PIC of a single-engine turbo-propeller aeroplane;
 - (iii) show evidence of having completed a course at an approved ATO as described in Appendix 13.3 of SA CATS 61, or an equivalent course acceptable to the Director;
 - (iv) have passed the Turbo-propeller/Turbojet endorsement examination, have completed the high performance aircraft theory requirements or be the holder of an ATPL(A);
 - (v) undergo a skills test for the endorsement with a DFE I or II (A); and
 - (vi) have his or her logbook endorsed by the DFE with the words: "Authorised to give instruction for single-engine turbo-propeller class ratings.
- (h) For the type rating instructor endorsement, the operator offering the type rating training must apply in writing to the Director motivating the reason for requiring the Grade III instructor and how he or she will be supervised. The instructor must
 - (i) have accumulated at least 100 hours of instruction in an aeroplane or FSTD;
 - (ii) be rated as PIC on the type if required to instruct on an aeroplane;
 - (iii) show evidence of having completed a course of instruction, acceptable to the Director, at an approved ATO on the specific type;
 - (iv) have passed the Turbo-propeller /Turbojet endorsement examination:
 - (v) have completed the high performance aircraft theory requirements or be the holder of an ATPL(A);
 - (vi) undergo a skills test for the endorsement with a DFE I or II (A) in the case of instructing on an aeroplane, or have a written authorization in the case of instructing on a FSTD; and
 - (vii) have his or her logbook endorsed by the DFE with the words: "Authorised to give instruction for the (type by name) type rating.

Period of validity and re-issue of Grade III Aeroplane Flight Instructor Rating

61.12.6 (1) A Grade III Aeroplane Flight Instructor Rating shall be valid for a period of 12 months calculated from –

- (a) the date of issue or re-issue; or
- (b) the beginning of the month following the date of
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such rating if revalidated prior to the period referred to in sub-paragraph (i).
- (2) If a period of 12 months or less has lapsed from the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating; and
 - (b) either -
 - (i) has given not less than 20 hours of flight instruction in aeroplanes; or
 - (ii) provides proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 aviation training organization or the SACAA.
- (3) If a period of more than 12 months has lapsed after the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) provides proof of having attended, within the 12 months preceding the application, a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority;
 - (b) has undergone sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a Grade III Flight Instructor Rating (Aeroplane); and
 - (c) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating.

Revalidation of Grade III Aeroplane Flight Instructor Rating

- **61.12.7** (1) To revalidate a Grade III Aeroplane Flight Instructor Rating, the holder of the rating must comply with the following requirements
 - (a) within the 90 days immediately preceding the date of expiry of such rating, he or she must pass the appropriate skills test with a DFE; and
 - (b) within the 12 months immediately preceding the date of expiry of such rating, he or she must either
 - (i) have given not less than 20 hours of flight instruction in aeroplanes; or
 - (ii) provide proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority.

- (2) The DFE must endorse the successful revalidation check as an Aeroplane Flight Instructor Grade III in the candidate's pilot logbook, complete the appropriate revalidation skills test form as prescribed in Document SA-CATS 61, and submit the form to the Director within 30 days of having completed the skills test, together with the applicable fee as prescribed in Part 187.
- (3) If the result of the skills test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the relevant privileges, the DFE must
 - (a) inform the applicant that he or she does not meet the requirements for the revalidation of the rating and that he or she must, with immediate effect, not exercise the privileges of the rating until such time he or she meets the requirements for the revalidation or re-issue of the rating *in toto*; and
 - (b) report such result to the Director in writing.

SUBPART 13: GRADE II AEROPLANE FLIGHT INSTRUCTOR RATING

Requirements for Grade II Aeroplane Flight Instructor Rating

- **61.13.1** An applicant for a Grade II Aeroplane Flight Instructor Rating must
 - (a) hold a valid CPL (Aeroplane) or an ATPL (Aeroplane);
 - (b) hold a valid instrument rating;
 - (c) must have the night rating instructor and instrument flight instructor endorsements in his or her logbook;
 - (d) hold, or have held during the immediately preceding 90 days, a valid Grade III Aeroplane Flight Instructor Rating;
 - (e) provide proof of having given instruction in every exercise of the PPL syllabus as listed in Appendix 1.1 of Document SA CATS 61;
 - (f) have successfully completed the appropriate training course as prescribed in Document SA-CATS 61, at a Part 141 approved ATO;
 - (g) have successfully undergone the instructor ground evaluation test referred to in Document SA-CATS 61; and
 - (h) pass the skills test referred to in regulation 61.13.4 conducted by a DFE within 30 days of successfully completing the instructor ground evaluation referred to in paragraph (g).

Application for Grade II Aeroplane Flight Instructor Rating

- **61.13.2** (1) An application for a Grade II Aeroplane Flight Instructor Rating must be made on the appropriate form and in the manner prescribed in Document SA-CATS 61 and submitted to the Director, within 30 days of having completed the skills test.
- (2) The application must be accompanied by the appropriate fee as prescribed in Part 187.

(3) If the applicant complies with the requirements referred to in regulation 61.17.1, the Director must issue a Grade II Aeroplane Flight Instructor Rating in the appropriate prescribed format.

Theoretical knowledge examination for Grade II Aeroplane Flight Instructor Rating

61.13.3 No additional theoretical examinations are required for the issue of a Grade II Aeroplane Flight Instructor Rating.

Skills test for Grade II Aeroplane Flight Instructor Rating

- **61.13.4** (1) The applicant must have demonstrated to an appropriately rated designated examiner the ability to perform as a Grade II Aeroplane Flight Instructor the procedures and manoeuvres prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of a Grade II Aeroplane Flight Instructor Rating.
- (2) The initial skills test must be undertaken -
 - (a) in a complex single- or multi-engine aeroplane with retractable undercarriage and variable pitch propeller; or
 - (b) in a aircraft with a turbojet engine, or
 - (c) in an approved aeroplane level D FSTD.
- (3) Before an applicant submits himself or herself for an initial skills test, he or she must provide the examiner with written proof that
 - (a) he or she has satisfactorily completed the required training at an approved Part 141 ATO; and
 - (b) the Grade I or Grade II Aeroplane Flight Instructor who has provided the supervision considers the performance of the applicant as an aeroplane flight instructor adequate for his or her upgrade to a Grade II Aeroplane Flight Instructor.
- (4) The applicant shall submit the forms to the Director, within 30 days of having completed the skills test.

Privileges and limitations of Grade II Aeroplane Flight Instructor Rating

- **61.13.5** (1) The holder of a valid Grade II Aeroplane Flight Instructor Rating may, with due regard to the provisions of sub-regulation (2), exercise all the privileges of a Grade III Aeroplane Flight Instructor, and may in addition in respect of aeroplanes of which he or she is the holder of the appropriate class or type ratings as flight instructor
 - (a) authorise the holder of a SPL for his or her initial solo flight;
 - (b) conduct the training for all aeroplane class and type ratings;
 - (c) conduct training in a turbine-engine aeroplane, provided he or she is the holder of the turbine instructor rating endorsement;
 - (d) conduct the training for a CPL (Aeroplane);

- (e) conduct the training for an ATPL (Aeroplane), provided that he or she is the holder of an ATPL (Aeroplane);
- (f) conduct the training for an instrument rating, provided he or she is the holder of an instrument flight training endorsement;
- (g) if he or she is the holder of appropriate instructor rating endorsement, as prescribed in Document SA-CATS 61, conduct the training for the issue of
 - (i) tug pilot rating;
 - (ii) agricultural pilot rating;
 - (iii) aerobatics rating;
 - (iv) tow rating;
 - (v) aeroplane test pilot ratings;
- (h) conduct training for a multi-engine class or type rating, provided that he or she is the holder of the multi-engine flight instructor endorsement;
- (i) conduct training in multi-pilot aeroplanes, provided that he or she is the holder of appropriate valid type rating as flight instructor;
- (j) conduct the training for the issue of a Grade II or Grade III Aeroplane Flight Instructor Rating provided that he or she is the holder of an instructor training endorsement;
- (k) conduct the skills tests for -
 - (i) the issue of a PPL (Aeroplane), provided that he or she meets the requirements detailed in Document SA-CATS 61 and has been appointed as Chief Flying Instructor (CFI) of an approved Part 141 training organisation, or has been appointed by the CFI of an approved Part 141 ATO:
 - (ii) the revalidation of a PPL (Aeroplane) without instrument rating;
 - (iii) the issue of a night rating;
 - (iv) the issue of a single-engine piston class rating;
 - (v) the endorsement of differences training for single- or multi-engine piston class aeroplane below 5 700 kg MCM, provided that the instructor is the holder of the appropriate instructor endorsement;
 - (vi) the issue of class or type rating for a single-engine turboprop aeroplane or a type rating for multi-engine turboprop or turbojet aeroplane provided that the applicant is already the holder of an appropriate MEP class or an SE/ME turbine or turbojet type rating and that the flight instructor holds the applicable turboprop or turbojet flight instructor endorsement;
 - (vii) the revalidation of instrument ratings and proficiency checks for in-house company-specific testing of fulltime employees of the operator, provided that he or she has the appropriate flight instructor endorsements, is a full time employee of the company, and has been appointed as a Grade III (Aeroplane);
- (I) endorse pilot logbooks in respect of familiarisation and differences training.

- (2) The holder of a valid Grade II Aeroplane Flight Instructor Rating who has demonstrated, to an appropriately rated DFE, or to a person authorised for the purpose in writing by the Director, the ability to carry out training, may endorse the pilot logbook of the applicant with the following ratings
 - (a) agricultural rating;
 - (b) aerobatics rating;
 - (c) tug pilot rating;
 - (d) tow rating; and
 - (e) test pilot ratings.

Period of validity and re-issue of Grade II Aeroplane Flight Instructor Rating

- **61.13.6** (1) A Grade II Aeroplane Flight Instructor Rating shall be valid for a period of 12 months from the date of initial issue and thereafter for a period of 36 months calculated from
 - (a) the date of issue or re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such rating if revalidated prior to the period referred to in sub-paragraph (i).
- (2) If a period of 60 months or less has lapsed from the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating; and
 - (b) within the 12 months preceding the application
 - (i) has given not less than 20 hours of flight instruction in aeroplanes; or
 - (ii) provides proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 aviation training organization or the Authority.
- (3) If a period of 60 months or more has lapsed after the date of expiry of the rating, the holder of the expired rating may apply to the Director for the reissuing of the rating, provided that he or she
 - (a) provides proof of having attended, within the 12 months preceding the application, a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority;
 - (b) has undergone sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a Grade II Flight Instructor Rating (Aeroplane); and

(c) has passed a revalidation check for a Grade II flight instructor rating with a DFE within the 30 days prior to the application for the revalidation of the rating.

Revalidation of Grade II Aeroplane Flight Instructor Rating

- **61.13.7** (1) To revalidate a Grade II Aeroplane Flight Instructor Rating, the holder of the rating must comply with the following requirements
 - (a) within the 90 days immediately preceding the date of expiry of such rating, he or she must pass the appropriate skills test with a DFE; and
 - (b) within the 12 months immediately preceding the date of expiry of such rating, he or she must either
 - (i) have given not less than 20 hours of flight instruction in aeroplanes; or
 - (ii) provide proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO.
- (2) The applicant shall submit the revalidation check form within 30 days of having completed the check, together with the applicable fee as prescribed in Part 187.
- (3) If the result of the skills test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the relevant privileges, the DFE must
 - (a) inform the applicant that he or she does not meet the requirements for the revalidation of the rating and that he or she must, with immediate effect, not exercise the privileges of the rating until such time he or she meets the requirements for the revalidation or re-issue of the rating *in toto*; and
 - (b) report such result to the Director in writing.

SUBPART 14: GRADE I AEROPLANE FLIGHT INSTRUCTOR RATING

Requirements for Grade I Aeroplane Flight Instructor Rating

- **61.14.1** An applicant for a Grade I Aeroplane Flight Instructor Rating must
 - (a) hold a valid CPL (Aeroplane) or an ATPL (Aeroplane);
 - (b) hold a valid multi-engine instrument rating;
 - (c) hold the appropriate instrument flight training endorsement if applicable;
 - (d) hold, or have held during the immediately preceding 90 days, a valid Grade II Aeroplane Flight Instructor Rating;
 - (e) have held a Grade II Aeroplane Flight Instructor Rating and must have –

- (i) given not less than 1500 hours of flight instruction as an aeroplane flight instructor; and
- (ii) acquired in an aeroplane or an approved FSTD at least 10 hours of instrument flight time during the six months immediately preceding the application.
- (f) have successfully completed the appropriate training course as prescribed in Document SA-CATS 61, with a Part 141 approved ATO;
- (g) have successfully undergone the instructor ground evaluation test referred to Document SA-CATS 61; and
- (h) undergo the skills test referred to in regulation 61.14.4 conducted by a DFE within 30 days of successfully completing the instructor ground evaluation referred to in paragraph (g).

Application for Grade I Aeroplane Flight Instructor Rating

- **61.14.2** (1) An application for a Grade I Aeroplane Flight Instructor Rating must be made on the appropriate form and in the manner prescribed in Document SA-CATS 61 and submitted to the Director, within 30 days of having completed the skills test.
- (2) The application must be accompanied by the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the requirements referred to in regulation 61.14.1, the Director must issue a Grade I Aeroplane Flight Instructor Rating in the appropriate prescribed format.

Theoretical knowledge examination for Grade I Aeroplane Flight Instructor Rating

61.14.3 No additional theoretical examinations are required for the issue of a Grade I Aeroplane Flight Instructor Rating.

Skills test for Grade I Aeroplane Flight Instructor Rating

- **61.14.4** (1) An applicant for a Grade I Aeroplane Flight Instructor Rating must have demonstrated to an appropriately rated DFE, selected from the panel appointed by the Director for conducting this particular test, the ability to perform the procedures and manoeuvres prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of a Grade I Aeroplane Flight Instructor Rating.
- (2) The initial skills test and revalidation check test must be undertaken:
 - (a) in a multi-engine aeroplane with retractable undercarriage and variable pitch propeller; or
 - (b) in an aeroplane with turbojet engines; or;
 - (c) in an approved aeroplane level D FSTD.

- (3) Before an applicant submits himself or herself for an initial skills test, he or she must provide the examiner with written proof that
 - (a) he or she has satisfactorily completed the required training at an approved Part 141 ATO; and
 - (b) the Grade I Aeroplane Flight Instructor who supervised the applicant considers him or her to be competent to attempt the initial skills test for the rating .
- (4) The applicant shall submit the forms to the Director, within 30 days of having completed the skills test.
- (5) A fee as prescribed in Part 187 is payable for the monitoring of the prescribed practical training process with specific reference to the research study as contemplated in Appendix 18.0 to Document SA-CATS 61.

Privileges and limitations of Grade I Aeroplane Flight Instructor Rating

- **61.14.5** (1) The holder of a valid Grade I Aeroplane Flight Instructor Rating, in addition to the privileges of a Grade II Aeroplane Flight Instructor, may conduct training on any aeroplane class or type on which he or she holds the appropriate instructor endorsement.
- (2) Conduct skills tests for the issue of type ratings in respect of multi-pilot aeroplanes, provided he or she holds the appropriate class or type rating with an instructor endorsement.

Period of validity and reissue of Grade I Aeroplane Flight Instructor Rating

- **61.14.6** (1) A Grade I Aeroplane Flight Instructor Rating shall be valid for a period of 12 months from the date of initial issue and thereafter for a period of 36 months calculated from
 - (a) the date of issue or reissue; or
 - (b) the beginning of the month following the date of -
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such rating if revalidated prior to the period referred to in subparagraph (i).
- (2) If a period of 60 months or less has lapsed from the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating; and
 - (b) within the 12 months preceding the application
 - (i) has given not less than 20 hours of flight instruction in aeroplanes; or
 - (ii) provides proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 aviation training organization or the Authority.

- (3) If a period of 60 months or more has lapsed after the date of expiry of the rating, the holder of the expired rating may apply to the Director for the re-issue of the rating, provided that he or she
 - (a) provides proof of having attended, within the 12 months preceding the application, a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority;
 - (b) has undergone sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a Grade I Flight Instructor Rating (Aeroplane); and
 - (c) has passed a revalidation check for a Grade I flight instructor rating with a DFE within the 30 days prior to the application for the revalidation of the rating.

Revalidation of Grade I Aeroplane Flight Instructor Rating

- **61.14.7** (1) To revalidate a Grade I Aeroplane Flight Instructor Rating, the holder of the rating must comply with the following requirements
 - (a) within the 90 days immediately preceding the date of expiry of such rating, he or she must pass the appropriate skills test with a DFE; and
 - (b) within the 12 months immediately preceding the date of expiry of such rating, he or she must either
 - (i) have given not less than 20 hours of flight instruction in aeroplanes; or
 - (ii) provide proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO.
- (2) The applicant shall submit the revalidation check form within 30 days of having completed the check, together with the applicable fee as prescribed in Part 187.
- (3) If the result of the skills test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the relevant privileges, the DFE must
 - (a) inform the applicant that he or she does not meet the requirements for the revalidation of the rating and that he or she must, with immediate effect, not exercise the privileges of the rating until such time he or she meets the requirements for the revalidation or re-issue of the rating *in toto*;
 - (b) report such result to the Director in writing.

SUBPART 15: GRADE III HELICOPTER FLIGHT INSTRUCTOR RATING

Requirements for Grade III Helicopter Flight Instructor Rating

61.15.1 (1) An applicant for a Grade III Helicopter Flight Instructor Rating must –

- (a) hold a valid CPL (Helicopter) or ATPL (Helicopter);
- (b) have successfully completed at least 20 hours of flight instructor patter training as prescribed in Document SA-CATS 61, conducted by a Grade I or a Grade II Helicopter Flight Instructor, of which at least 15 hours must be in a helicopter and 5 hours may be in an approved FSTD;
- (c) have passed the theoretical knowledge examination referred to in regulation 61.19.3;
- (d) have successfully completed the appropriate training course as prescribed in Document SA-CATS 61, with a Part 141 approved ATO;
- (e) have successfully undergone the instructor ground evaluation test referred to Document SA-CATS 61; and
- (f) pass the skills test referred to in regulation 61.15.4 conducted by a DFE within 36 months of completing the instructor theoretical knowledge examinations and within 30 days of successfully completing the instructor ground evaluation referred to in paragraph (e).
- (2) A South African Air Force pilot instructor and navigator instructor may apply for exemption for some or all of the requirements, referred to in sub-regulation (1), as indicated in regulation 61.01.9(23).
- (3) The holder of a flight instructor rating in another category of aircraft may be exempted from attending the theoretical training referred to in paragraph (e) of sub-regulation (1).
- (4) The number of hours referred to in paragraph (b) of sub-regulation (1) may be reduced to 10 hours of flight training in helicopters if the applicant is the holder of a flight instructor rating in another category of aircraft..

Application for Grade III Helicopter Flight Instructor Rating

- **61.15.2** (1) An application for a Grade III Helicopter Flight Instructor Rating must be made on the appropriate form and in the manner prescribed in Document SA-CATS 61 and submitted to the Director within 30 days of having completed the skills test.
- (2) The application must be accompanied by the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the requirements referred to in regulation 61.15.1, the Director must issue a Grade III Helicopter Flight Instructor Rating in the appropriate prescribed format.

Theoretical knowledge examination for Grade III Helicopter Flight Instructor Rating

- **61.15.3** (1) An applicant for a Grade III Helicopter Flight Instructor Rating must have passed the appropriate written examination, conducted by the Authority, as prescribed in Document SA-CATS 61.
- (2) An applicant, who is the holder of a flight instructor rating in another category of aircraft, may be exempted from that portion of the theoretical knowledge examinations dealing with matters of a common nature already passed.

Skills test for Grade III Helicopter Flight Instructor Rating

- **61.15.4** (1) An applicant for a Grade III Helicopter Flight Instructor Rating must have demonstrated to an appropriately rated DFE the ability to perform as a Grade III Helicopter Flight Instructor the procedures and manoeuvres prescribed in Document SA-CATS 61 with a degree of competency appropriate to the privileges granted to the holder of a Grade III Helicopter Flight Instructor Rating.
- (2) The applicant must undergo the skills test within 36 months of passing the appropriate theoretical knowledge examination and within the 30 days immediately preceding the date of application.
- (3) The skills test must be conducted in an helicopter, fitted with fully functional dual controls, or in an approved level D FSTD.
- (4) Before an applicant submits himself or herself for the initial skills test, he or she must provide the examiner with written proof that
 - (a) he or she has satisfactorily completed the required training conducted by an approved Part 141 ATO; and
 - (b) the Grade I or Grade II Helicopter Flight Instructor who has provided the supervision and training considers the performance of the applicant adequate for the skills test for a Grade III Helicopter Flight Instructor.
- (5) The applicant shall submit the forms to the Director within 30 days of having completed the skills test.

Privileges and limitations of Grade III Helicopter Flight Instructor Rating

- **61.15.5** (1) The holder of a valid Grade III Helicopter Flight Instructor Rating may, under the supervision of a Grade I or Grade II Helicopter Flight Instructor with the appropriate type ratings, give flight instruction in helicopters in respect of which he or she is the holder of appropriate type rating as an instructor.
- (2) A Grade III Flight Instructor may give flight instruction limited towards
 - (a) the issue of a PPL (Helicopter) and single-engine type ratings in respect of helicopters with a MCM of 3 175 kg or less;
 - (b) differences and familiarisation training;
 - (c) recurrent training; and
 - (d) route training.
- (3) The holder of a valid Grade III Helicopter Flight Instructor Rating must have demonstrated, to a DFE with the appropriate type rating and specific field endorsement, or to a person authorised for the purpose in writing by the Director, the ability to provide flight instruction in that field with a degree of competency appropriate to the privileges granted by the rating and

endorsement, in order for him or her to exercise the privileges, referred to in sub-regulation (2), in any of the following fields –

- (a) instrument flight training; provided that the holder shall also hold a valid instrument rating on either aeroplanes or helicopters;
- (b) turbine-engine helicopter flight training;
- (c) multi-engine helicopter flight training;
- (4) For the purposes of sub-regulations (2) and (3), the Chief Flying Instructor (CFI), or a Grade I or Grade II Helicopter Flight Instructor who has been approved for the purpose by the CFI, shall provide supervision and guidance with regard to the following
 - (a) periodic surveillance;
 - (b) assessment of the standard of instruction provided;
 - (c) standardisation of the methods of instruction used; and
 - (d) guidance on the conduct of all ATO operations.
- (5) Notwithstanding the provisions of sub-regulation (2), the holder of a Grade III Helicopter Flight Instructor Rating, who has been the holder of a Grade I or Grade II Helicopter Flight Instructor Rating in the past, may apply to the Director to retain all or some of the privileges of a Grade II Helicopter Flight Instructor.
- (6) Notwithstanding the provisions of sub-regulation (5), the holder of a Grade III Helicopter Flight Instructor Rating, who has a minimum of 500 hours helicopter flight instructor experience, may apply to the Director to exercise some of the privileges of a Grade II Helicopter Flight Instructor.

Period of validity and re-issue of Grade III Helicopter Flight Instructor Rating

- **61.15.6** (1) A Grade III Helicopter Flight Instructor rating shall be valid for a period of 12 months calculated from
 - (a) the date of issue or re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such rating if revalidated prior to the period referred to in sub-paragraph (i).
- (2) If a period of 12 months or less has lapsed from the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating; and
 - (b) either -
 - (i) has given not less than 20 hours of flight instruction in helicopters; or

- (ii) provides proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 aviation training organization or the Authority.
- (3) If a period of more than 12 months has lapsed after the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) provides proof of having attended, within the 12 months preceding the application, a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority;
 - (b) has undergone sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a Grade III Flight Instructor Rating (Helicopter); and
 - (c) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating.
- (4) An application for the reissuing of the expired rating must be made in the manner prescribed in regulation 61.19.2.

Revalidation of Grade III Helicopter Flight Instructor Rating

- **61.15.7** (1) To revalidate a Grade III Helicopter Flight Instructor Rating, the holder of the rating must comply with the following requirements
 - (a) within the 90 days immediately preceding the date of expiry of such rating, he or she must pass the appropriate skills test with a DFE; and
 - (b) within the 12 months immediately preceding the date of expiry of such rating, he or she must either
 - (i) have given not less than 20 hours of flight instruction in helicopters; or
 - (ii) provide proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO.
- (2) The DFE must endorse the successful revalidation check as a Grade III Helicopter Flight Instructor in the candidate's pilot logbook, complete the appropriate revalidation skills test form as prescribed in Document SA-CATS 61 and submit the form to the Director, within 30 days of having completed the skills test, together with the applicable fee as prescribed in Part 187.
- (3) If the result of the skills test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the relevant privileges, the DFE must
 - (a) inform the applicant that he or she does not meet the requirements for the revalidation of the rating and that he or she must, with immediate effect, not exercise the privileges of the rating until such time he or she meets the requirements for the revalidation or re-issue of the rating in toto; and
 - (b) report such result to the Director in writing.

SUBPART 16: GRADE II HELICOPTER FLIGHT INSTRUCTOR RATING

Requirements for Grade II Helicopter Flight Instructor Rating

- **61.16.1** An applicant for a Grade II Helicopter Flight Instructor Rating must
 - (a) hold a valid CPL (Helicopter) or an ATPL (Helicopter);
 - (b) hold a valid night rating;
 - (c) hold the appropriate instrument flight training endorsement if applicable;
 - (d) hold, or have held during the immediately preceding 90 days, a valid Grade III Helicopter Flight Instructor Rating:
 - (e) have held a Grade III Helicopter Flight Instructor Rating for at least 8 months and must have given not less than 200 hours of flight instruction as a Grade III Helicopter Flight Instructor;
 - (f) have successfully completed the appropriate training course as prescribed in Document SA-CATS 61, at a Part 141 approved ATO;
 - (g) have successfully undergone the instructor ground evaluation test referred to Document SA-CATS 61; and
 - (h) pass the skills test referred to in regulation 61.16.4 conducted by a DFE within 30 days of successfully completing the instructor ground evaluation referred to in paragraph (g).

Application for Grade II Helicopter Flight Instructor Rating

- **61.16.2** (1) An application for a Grade II Helicopter Flight Instructor Rating must be made on the appropriate form and in the manner prescribed in Document SA-CATS 61 and submitted to the Director within 30 days of having completed the skills test.
- (2) The application must be accompanied by the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the requirements, referred to in regulation 61.16.1, the Director must issue a Grade II Helicopter Flight Instructor Rating in the appropriate prescribed format.

Theoretical knowledge examination for Grade II Helicopter Flight Instructor Rating

61.16.3 No additional theoretical examinations are required for the issue of a Grade II Helicopter Flight Instructor Rating.

Skills test for Grade II Helicopter Flight Instructor Rating

61.16.4 (1) The applicant must have demonstrated to an appropriately rated designated examiner the ability to perform as a Grade II Helicopter Flight Instructor the procedures and manoeuvres prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of a Grade II Helicopter Flight Instructor Rating.

- (2) The initial skills test must be conducted in an helicopter, fitted with fully functional dual controls, or in an approved helicopter level D FSTD.
- (3) Before an applicant submits himself or herself for an initial skills test, he or she must provide the examiner with written proof that
 - (a) he or she has satisfactorily completed the required training at an approved Part 141 ATO: and
 - (b) the Grade I or Grade II Helicopter Flight Instructor who has provided the supervision considers the performance of the applicant as an Helicopter Flight Instructor adequate for his or her upgrade to a Grade II Flight Instructor.
- (4) The applicant shall submit the forms to the Director within 30 days of having completed the skills test.

Privileges and limitations of Grade II Helicopter Flight Instructor Rating

- **61.16.5** (1) The holder of a valid Grade II Helicopter Flight Instructor Rating may, with due regard to the provisions of sub-regulation (2), exercise all the privileges of a Grade III Helicopter Flight Instructor, and may in addition in respect of helicopters of which he or she is the holder of the appropriate type ratings as flight instructor
 - (a) conduct training for a turbine-engine helicopter, provided he or she is the holder of the turbine instructor rating endorsement;
 - (b) conduct the training for a CPL (Helicopter);
 - (c) conduct the training for an ATPL (Helicopter), provided that he or she is the holder of an ATPL (Helicopter);
 - (d) conduct the training for an instrument rating, provided that he or she is the holder of a valid instrument rating (helicopter) and an instrument flight training endorsement;
 - (e) if he or she is the holder of the appropriate flight instructor rating endorsement, as prescribed in Document SA-CATS 61, conduct the training for the issue of
 - (i) the helicopter sling load rating;
 - (ii) the helicopter game or livestock cull rating;
 - (iii) the agricultural pilot rating;
 - (iv) the helicopter winching rating; and
 - (v) the helicopter test pilot ratings;
 - (f) conduct training in multi-pilot helicopters, provided that he or she is the holder of the appropriate valid type rating as flight instructor;
 - (g) conduct the training for the issue of a Grade II or Grade III Helicopter Flight Instructor Rating provided that he or she is the holder of the appropriate flight instructor training endorsement.
 - (h) conduct -
 - (i) the initial skills tests for the issue of a Private Pilots Licence (Helicopter), provided that he or she meets the requirements detailed in Document SA-

- CATS 61 and has been appointed as Chief Flying Instructor (CFI) of an approved Part 141 training organisation, or has been appointed by the CFI of an approved Part 141 training organisation and is subjected to the oversight requirements detailed in Document SA-CATS 61;
- (ii) the skills tests for the revalidation of a PPL (Helicopter) without instrument rating, and enter the appropriate endorsements;
- (iii) the skills test for the issue of a night rating;
- (iv) the training for an instrument rating provided that he or she is the holder of a valid instrument rating (helicopter); and
- (v) the skills tests for the revalidation of instrument ratings and proficiency checks for in-house company-specific testing of full-time employees of the company, provided that he or she has the appropriate flight instructor endorsements, and has been appointed as a DFE Grade III (Helicopter).
- (2) The holder of a valid Grade II Helicopter Flight Instructor Rating who has demonstrated, to an appropriately rated DFE, or to a person authorised for the purpose in writing by the Director, the ability to carry out training, may endorse the pilot logbook of the applicant with the following ratings
 - (a) turbine-engine helicopter rating;
 - (b) multi-engine helicopter rating;
 - (c) agricultural rating;
 - (d) instrument rating;
 - (e) helicopter sling load rating;
 - (f) helicopter winching rating; and
 - (g) helicopter test pilot ratings.

Period of validity and re-issue of Grade II Helicopter Flight Instructor Rating

- **61.16.6** (1) A Grade II Helicopter Flight Instructor Rating shall be valid for a period of 12 months from the date of initial issue and thereafter for a period of 36 months calculated from
 - (a) the date of issue or re-issue; or
 - (b) the beginning of the month following the date of
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such rating if revalidated prior to the period referred to in sub-paragraph (i);
- (2) If a period of 60 months or less has lapsed from the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating; and
 - (b) within the 12 months preceding the application
 - (i) has given not less than 20 hours of flight instruction in helicopters; or

- (ii) provides proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 aviation training organization or the Authority.
- (3) If a period of 60 months or more has lapsed after the date of expiry of the rating, the holder of the expired rating may apply to the Director for the reissuing of the rating, provided that he or she
 - (a) provides proof of having attended, within the 12 months preceding the application, a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority;
 - (b) has undergone sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a Grade II Flight Instructor Rating (helicopter); and
 - (c) has passed a revalidation check for a Grade II flight instructor rating with a DFE within the 30 days prior to the application for the revalidation of the rating.

Revalidation of Grade II Helicopter Flight Instructor Rating

- **61.16.7** (1) To revalidate a Grade II Helicopter Flight Instructor Rating, the holder of the rating must comply with the following requirements
 - (a) within the 90 days immediately preceding the date of expiry of such rating, he or she must pass the appropriate skills test with a DFE; and
 - (b) within the 12 months immediately preceding the date of expiry of such rating, he or she must either
 - (i) have given not less than 20 hours of flight instruction in helicopters; or
 - (ii) provide proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO.
- (2) The applicant shall submit the revalidation check form within 30 days of having completed the check, together with the applicable fee as prescribed in Part 187.
- (3) If the result of the skills test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the relevant privileges, the DFE must
 - (a) inform the applicant that he or she does not meet the requirements for the revalidation of the rating and that he or she must, with immediate effect, not exercise the privileges of the rating until such time he or she meets the requirements for the revalidation or re-issue of the rating *in toto*; and
 - (b) report such result to the Director in writing.

SUBPART 17: GRADE I HELICOPTER FLIGHT INSTRUCTOR RATING

Requirements for Grade I Helicopter Flight Instructor Rating

61.17.1 An applicant for a Grade I Helicopter Flight Instructor Rating must –

- (a) hold a valid CPL (Helicopter) or an ATPL (Helicopter);
- (b) hold a valid multi-engine instrument rating;
- (c) hold the appropriate instrument flight training endorsement;
- (d) hold, or have held during the immediately preceding 90 days, a valid Grade II Helicopter Flight Instructor Rating;
- (e) have held a Grade II Helicopter Flight Instructor Rating for at least 8 months and must have
 - (i) given not less than 1 500 hours of flight instruction as a helicopter flight instructor; and
 - (ii) acquired in an aircraft or an approved FSTD at least 10 hours of instrument flight time during the six months immediately preceding the application;
- (f) have successfully completed the appropriate training course as prescribed in Document SA-CATS 61, with a Part 141 approved ATO;
- (g) have successfully undergone the instructor ground evaluation test referred to Document SA-CATS 61; and
- (h) undergo the skills test referred to in regulation 61.17.4 conducted by a DFE within 30 days of successfully completing the instructor ground evaluation referred to in paragraph (g).

Application for Grade I Helicopter Flight Instructor Rating

- **61.17.2** (1) An application for a Grade I Helicopter Flight Instructor Rating must be made on the appropriate form and in the manner prescribed in Document SA-CATS 61 and submitted to the Director within 30 days of having completed the skills test.
- (2) The application must be accompanied by the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the requirements referred to in regulation 61.17.1, the Director must issue a Grade I Helicopter Flight Instructor Rating in the appropriate prescribed format.

Theoretical knowledge examination for Grade I Helicopter Flight Instructor Rating

61.17.3 No additional theoretical examinations are required for the issue of a Grade I Helicopter Flight Instructor Rating.

Skills test for Grade I Helicopter Flight Instructor Rating

61.17.4 (1) An applicant for a Grade I Helicopter Flight Instructor Rating must have demonstrated to an appropriately rated DFE, selected from the panel appointed by the Director for conducting this particular test, the ability to perform the procedures and manoeuvres prescribed in Document SA-CATS 61 with a degree of competency appropriate to the privileges granted to the holder of a Grade I Helicopter Flight Instructor Rating.

- (2) The skills test referred to in sub-regulation (1) must be conducted in a multi-engine helicopter with fully functional dual controls, or in an approved level D FSTD.
- (3) Before an applicant submits himself or herself for the initial skills test, he or she must provide the examiner with written proof that
 - (a) he or she has satisfactorily completed the required training conducted by an approved Part 141 ATO; and
 - (b) the Grade I Helicopter Flight Instructor who has provided the training considers the performance of the applicant as a helicopter flight instructor adequate for his or her upgrade to a Grade I Helicopter Flight Instructor.
- (4) A fee as prescribed in Part 187 is payable for the monitoring of the prescribed practical training process with specific reference to the research study as contemplated in Appendix 18.0 to Document SA-CATS 61.

Privileges and limitations of Grade I Helicopter Flight Instructor Rating

- **61.17.5** The holder of a valid Grade I Helicopter Flight Instructor Rating may, in addition to the privileges of a Grade II or Grade III Helicopter Flight Instructor, conduct
 - (a) training on any helicopter type provided he or she holds the appropriate type rating with an instructor endorsement; and
 - (b) conduct skills tests for the issue of type ratings in respect of multi-pilot helicopters, provided he or she holds the appropriate type rating with an instructor endorsement.

Period of validity and reissue of Grade I Helicopter Flight Instructor Rating

- **61.17.6** (1) A Grade I Helicopter Flight Instructor Rating shall be valid for a period of 12 months from the date of initial issue and thereafter for a period of 36 months calculated from
 - (a) the date of issue or reissue; or
 - (b) the beginning of the month following the date of -
 - (i) expiry of the rating if such rating is revalidated within 90 days immediately prior to expiry; or
 - (ii) revalidation of such rating if revalidated prior to the period referred to in sub-paragraph (i).
- (2) If a period of 60 months or less has lapsed from the date of expiry of the rating, the licence holder may apply to the Director for the reissuing of the rating, if he or she
 - (a) has passed a revalidation check with a DFE within the 30 days prior to the application for the revalidation of the rating; and
 - (b) within the 12 months preceding the application
 - (i) has given not less than 20 hours of flight instruction in helicopters; or
 - (ii) provides proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 aviation training organization or the Authority.

- (3) If a period of 60 months or more has lapsed after the date of expiry of the rating, the holder of the expired rating may apply to the Director for the reissuing of the rating, provided that he or she
 - (a) provides proof of having attended, within the 12 months preceding the application, a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO or the Authority;
 - (b) has undergone sufficient ground and flight training at an approved ATO to reach the standard required for the revalidation check of a Grade II Flight Instructor Rating (helicopter); and
 - (c) has passed a revalidation check for a Grade II flight instructor rating with a DFE within the 30 days prior to the application for the revalidation of the rating.

Revalidation of Grade I Helicopter Flight Instructor Rating

- **61.17.7** (1) To revalidate a Grade I Helicopter Flight Instructor rating, the holder of the rating must comply with the following requirements
 - (a) within the 90 days immediately preceding the date of expiry of such rating, he or she must pass the appropriate skills test with a DFE; and
 - (b) within the 12 months immediately preceding the date of expiry of such rating, he or she must either
 - (i) have given not less than 20 hours of flight instruction in helicopters; or
 - (ii) provide proof of having attended a flight instructor refresher seminar as prescribed in Document SA-CATS 61, conducted by an approved Part 141 ATO.
- (2) The applicant shall submit the revalidation check form within 30 days of having completed the check, together with the applicable fee as prescribed in Part 187.
- (3) If the result of the skills test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the relevant privileges, the DFE must
 - (a) inform the applicant that he or she does not meet the requirements for the revalidation of the rating and that he or she must, with immediate effect, not exercise the privileges of the rating until such time he or she meets the requirements for the revalidation or re-issue of the rating *in toto*; and
 - (b) report such result to the Director in writing.

SUBPART 18: FLIGHT SIMULATION TRAINING DEVICE INSTRUCTOR AUTHORISATION

Requirements for Flight Simulation Training Device Instructor authorisation

- **61.18.1** (1) A Grade I and Grade II Flight Instructor who is currently authorised to provide instruction on an FSTD at an approved ATO, in terms of and listed in the ATO's manual of procedures, may continue to do so under the supervision of the Chief Instructor of the ATO.
- (2) An ATO wishing to appoint a new Grade I or Grade II Flight Instructor to provide instruction on a FSTD, must provide details of a training course which includes the operation of the FSTD and the number of training sessions (dependent on the sophistication of the FSTD) to be given by the new applicant under the supervision of an existing FSTD instructor; thereafter apply to add the Flight Instructor to the ATO's MOP and comply with the requirements of sub-regulation (1) for existing instructors.
- (3) In the case of a Grade III Flight Instructor, the Chief Instructor of the ATO must apply to the Director for approval for the Grade III instructor to carry out instruction on a FSTD at that particular ATO and under the supervision of the Chief Instructor, stating how the supervision will be carried out, and thereafter comply with the requirements of sub-regulation (2).
- (4) In addition to the requirement specified in sub-regulation (3), a Grade III instructor at general aviation flight schools must be given guidance on providing the instruction required for the 5 hours of FSTD training permitted towards the PPL.
- (5) In the case of personnel utilised for training on a FSTD who no longer hold a valid licence and Flight Instructor rating, the same procedures and requirements apply as for a Grade III Flight Instructor as in sub-regulation (3).

Theoretical knowledge examination for FSTD Instructor Authorisation

- **61.18.2** (1) An applicant for an FSTD Instructor Authorisation must have passed the appropriate written examination as prescribed in Document SA-CATS 61.
- (2) The holder of a valid instructor rating may be exempted from those parts of the examination already passed for the issue of his or her instructor rating.
- (3) In the case of an instructor rating that has lapsed for a period of more than five years, the applicant will be required to undergo the examinations referred to in sub-regulation (1).

Skills test for FSTD Instructor Authorisation

- **61.18.3** (1) An applicant for an FSTD Instructor Authorisation must have passed the skills test that demonstrate the ability to perform as an FSTD Instructor the procedures and manoeuvres, as prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges to be granted to the holder of the FSTD Instructor Authorisation.
- (2) The skills test must be conducted
 - (a) by a DFE, who must be the holder of the appropriate type rating, if the authorisation is sought for a type rating; or

- (b) in other cases, by a Grade I or a Grade II flight instructor with the appropriate ratings and endorsements as a flight instructor, or by a person authorised in writing for the purpose by the Director.
- (3) The applicant must undergo the skills test within the six months of passing the theoretical knowledge examination and within the 30 days immediately preceding the date of application.
- (4) The skills test must be conducted in an appropriate FSTD.
- (5) If the applicant complies with the prescribed requirements, the examiner must
 - (a) sign the appropriate page of the authorisation of such holder;
 - (b) endorse the logbook of such holder; and
 - (c) complete the appropriate prescribed form and submit the form to the Director.

Application for FSTD Instructor Authorisation

- **61.18.4** (1) An application for an FSTD Instructor Authorisation must be made to the Director in the appropriate prescribed form .
- (2) The application must be accompanied by
 - (a) proof that the applicant has been the holder of a CPL or ATPL in the appropriate category if not currently holding such pilot licence;
 - (b) proof of holding or having held an instrument rating if the applicant is to conduct training towards an instrument rating;
 - (c) a certified summary of the applicant's logbook or logbooks reflecting his or her pilot flying hours and the FSTD hours; and
 - (d) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue an FSTD Instructor Authorisation in the appropriate form as prescribed by the Director, if the applicant complies with the prescribed requirements.

Period of validity for an FSTD Instructor Authorisation

- **61.18.5** An FSTD Instructor Authorisation shall be valid for a period of three years calculated
 - (a) from the date of issue or re-issue of the Authorisation; or
 - (b) from the date of expiry of the Authorisation if such Authorisation is revalidated.

Privileges and limitations of an FSTD Instructor Authorisation

- **61.18.6** (1) No person at a Part 141 approved ATO may conduct training in a FSTD towards obtaining a licence or a rating, or for the purposes of prescribed recurrent or refresher training, unless he or she is the holder of a valid
 - (a) FSTD Instructor Authorisation appropriate to the aircraft category and level of qualification of the FSTD in which the training is conducted; or

- (b) flight instructor rating and endorsements appropriate to the training to be given in the FSTD and who has been trained, to the satisfaction of the Part 141 ATO, to provide instruction in the FSTD to be utilized; and has been trained in the techniques required to give instruction in an FSTD.
- (2) An FSTD Instructor Authorisation may be issued for any of the following courses in aeroplanes or helicopters
 - (a) training towards type ratings and class ratings for which there is an approved FSTD:
 - (b) instrument flight training;
 - (c) recurrent training;
 - (d) refresher training;
 - (e) multi-crew cooperation (MCC) training; and
 - (f) other training.
- (3) The holder of an FSTD Instructor Authorisation has a responsibility of properly maintaining a logbook detailing all training undergone and conducted, and also showing all flights as an observer.
- (4) The holder of an FSTD Instructor Authorisation, whilst conducting training in an FSTD, must produce the Authorisation when requested by an authorised officer, inspector, or authorised person.

Revalidation of an FSTD Instructor Authorisation

- **61.18.7** (1) To revalidate an FSTD Instructor Authorisation, the holder of the Authorisation must
 - (a) within the 12 months immediately preceding the date of expiry of such Authorisation
 - (i) have conducted a type rating, refresher, recurrent, instrument rating or multi-crew co-operation (MCC) training course;
 - (ii) have completed an exercise of at least one hour duration in the role of Pilot Flying (PF) in the FSTD comprising at least two approaches and, where applicable, two take-offs and landings; and
 - (iii) in the case of a type rating training authorisation, have completed at least four route sectors as a flight crew member or observer on the flight deck of the applicable type of aircraft; and
 - (b) within the 90 days immediately preceding the date of expiry of such Authorisation, have successfully undergone the skills test referred to in regulation 61.18.3.
- (2) If the result of the skills test contemplated in sub-regulation (1)(b) reveals that the holder of the Authorisation has failed to maintain the minimum standard required for exercising the relevant privileges, the examiner must
 - (a) report such result to the Director; and

- (b) not sign the appropriate page of the Authority.
- (3) The holder of the FSTD Instructor Authority must be suspended with immediate effect if the holder fails the revalidation skills test, until such time that the holder passes the revalidation test.

Re-issue of an FSTD Instructor Authorisation

- **61.18.8** (1) The holder of an FSTD Instructor Authorisation that has expired may apply to the Director for the reissuing of the expired Authorisation.
- (2) The Director must re-issue the expired Authorisation if the applicant complies with the requirements for an FSTD Instructor Authorisation.

SUBPART 19: POST MAINTENANCE TEST FLIGHT RATING

Requirements for issue of rating

- **61.19.1** (1) An applicant for a Class II test pilot rating shall
 - (a) be the holder of a valid PPL or higher grade licence;
 - (b) have completed not less than 500 hours' flight time of which not less that 300 hours were as PIC:
 - (c) be the holder of the appropriate aircraft category rating;
 - (d) be the holder of the appropriate aircraft class rating; and
 - (e) satisfy the Director that he has adequate knowledge of test flying techniques.
- (2) An applicant for a Class I test pilot rating shall
 - (a) be the holder of a valid PPL or higher grade licence;
 - (b) have completed not less than 1000 hours' flight time of which not less that 700 hours were as PIC;
 - (c) be the holder of the appropriate aircraft category rating;
 - (d) be the holder of the appropriate aircraft class rating; and
 - (e) satisfy the Director that he has successfully completed a recognised test pilot course.

SUBPART 20: TUG PILOT RATING

Requirements for tug pilot rating

61.20.1 (1) An applicant for a tug pilot rating must –

- (a) hold at least a valid PPL (Aeroplane) with a minimum of 60 hours as PIC of aeroplanes;
- (b) hold the appropriate endorsement for an aircraft within a class rating or type rating for the aeroplane;
- (c) have acquired suitable experience that includes completion of at least 10 tug operations (that includes towing different weight class gliders, exposure to glider pilot aerotow training manoeuvres, aerotow upset training and aerotow emergencies) under the supervision of an appropriately rated Grade I or Grade II flight instructor, or by the holder of a tug pilot rating designated for such purpose in writing by the Director; and
- (d) have demonstrated to an appropriately rated Grade I or Grade II flight instructor or the holder of a tug pilot rating designated for such purpose in writing by the Director, the proficiency to act as PIC of a tug aeroplane whilst having a glider in tow.
- (2) The Grade 1 or Grade II flight instructor who oversees the skills test must endorse the pilot's logbook and submit notification of the endorsement to the Authority on the appropriate prescribed form.

Privileges of tug pilot rating

61.20.2 The holder of a tug pilot rating may act as PIC of an aeroplane during tug operations.

SUBPART 21: TOW RATING

Requirements for a Tow Rating (Aeroplane)

61.21.1 An applicant for a tow rating must –

- (a) hold at least a valid PPL (Aeroplane);
- (b) hold the appropriate endorsement for an aircraft within a class rating or type rating for the aeroplane;
- (c) have acquired suitable experience that includes at least completion of 10 tow operations under the supervision of an appropriately rated Grade I or Grade II flight instructor, or by the holder of a tow rating designated for such purpose in writing by the Director; and
- (d) have demonstrated to an appropriately rated Grade I or Grade II flight instructor or the holder of a tow rating designated for such purpose in writing by the Director, the ability to act as PIC of an aeroplane while having a banner in tow.
- (2) The Grade 1 or Grade II flight instructor who oversees the skills test must endorse the pilot's logbook and submit notification of the endorsement to the Director in the appropriate prescribed form .

Privileges of a Tow Rating (Aeroplane)

61.21.2 The holder of a tow rating may act as PIC of an aeroplane during tow operations.

SUBPART 22: HELICOPTER SLING LOAD RATING

Requirements for Helicopter Sling Load Rating

- **61.22.1** (1) For the purpose of this Subpart, the definition of 'Helicopter Sling Load' includes rappelling, towing, and the lifting and laying down of external cargo while they are being fixed to or disassembled from a surface during the helicopter operation.
- (2) An applicant for the issuing of a helicopter sling load rating must
 - (a) hold at least a valid CPL (Helicopter);
 - (b) hold the appropriate helicopter class rating or type rating by name;
 - (c) have acquired the experience that include at least completion of not less than 250 hours of flight time as PIC of a helicopter of which not less than five hours flight time of sling load operations must have been undertaken under the supervision of an appropriately rated Grade I or Grade II flight instructor who is the holder of a valid helicopter sling load rating;
 - (d) have successfully completed the appropriate training as prescribed in Document SA-CATS 61; and
 - (e) have successfully undergone a skills test demonstrating to an appropriately rated Grade I flight instructor, or to a person designated by the Director in writing for the purpose, his or her ability to perform as PIC of a helicopter the procedures and manoeuvres as prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of a helicopter sling load rating.
- (3) The applicant must undergo the skills test referred to in paragraph (e) of sub-regulation (2) within 30 days immediately preceding the date of application.

Application for Helicopter Sling Load Rating

- **61.22.2** (1) An application for a helicopter sling load rating must be made to the Director in the appropriate prescribed form as .
- (2) The application must be accompanied by
 - (a) a copy of the relevant page of the logbook of the applicant;
 - (b) certified proof that the applicant has successfully completed the training prescribed in regulation 61.22.1; and
 - (c) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue a helicopter sling load rating, in the appropriate prescribed format, if the applicant complies with the prescribed requirements.

Privileges of Helicopter Sling Load Rating

- **61.22.3** (1) The holder of a helicopter sling load rating may act in VMC under VFR as PIC of a helicopter, in respect of which he or she holds the appropriate class rating or type rating by name, engaged in sling load operations.
- (2) The privileges referred to in sub-regulation (1) may only be exercised at night if the holder of the sling load rating is also the holder of the night rating, and the position of the helicopter, its flight attitude and its height can be maintained by reference to external objects, adequately illuminated by helicopter, ground or celestial lighting.
- (3) Notwithstanding the provisions of sub-regulation (1), the privileges may be exercised in IMC under IFR by an appropriately rated helicopter pilot who is also the holder of a valid helicopter instrument rating, provided that the uplift and laying down of the sling load is carried out with the use of external visual references by day or night and prior approval is received from the Director.

Period of validity for Helicopter Sling Load Rating

- **61.22.4** (1) A helicopter sling load rating shall be valid as long as the pilot licence of the holder of the rating is valid.
- (2) Notwithstanding the provisions of sub-regulation (1), the privileges of the rating may not be exercised by the holder thereof unless he or she complies with the provisions of regulation 61.32.3.

SUBPART 23: HELICOPTER WINCHING RATING

Requirements for Helicopter winching rating

- **61.23.1** (1) An applicant for a helicopter winching rating must
 - (a) hold a valid, CPL (Helicopter) or ATPL (Helicopter);
 - (b) hold the appropriate helicopter type rating;
 - (c) have acquired the experience of completion of at least 250 hours of flight time as PIC of a helicopter of which not less than five hours flight time of winching operations must have been undertaken under the supervision of an appropriately rated Grade II or Grade I flight instructor, who is the holder of a valid helicopter winching rating;
 - (d) have successfully completed appropriate training as prescribed in Document SA-CATS 61; and
 - (e) have successfully passed the prescribed skills test thereby demonstrating, to an appropriately rated Grade I flight instructor, or to a person designated by the Director in writing for the purpose, the ability to perform as PIC of a helicopter the procedures and manoeuvres as prescribed in Document SA-CATS 61, with a

degree of competency appropriate to the privileges granted to the holder of a helicopter winching rating referred to in regulation 61.23.3.

(2) The applicant must undergo the skills test referred to in paragraph (e) of sub-regulation (1) within 30 days immediately preceding the date of application.

Application for Helicopter winching rating

- **61.23.2** (1) An application for a helicopter winching rating must be made to the Director in the appropriate prescribed form as .
- (2) The application must be accompanied by -
 - (a) a copy of the relevant page of the logbook of the applicant;
 - (b) certified proof that the applicant has successfully completed the prescribed training; and
 - (c) the appropriate fee as prescribed in Part 187.
- (3) If the applicant complies with the prescribed requirements, the Director must issue a helicopter winching rating in the prescribed format.

Privileges of Helicopter winching rating

- **61.23.3** (1) The holder of a helicopter winching rating may act as PIC of a helicopter, engaged in winching operations under VMC, in respect of which he or she holds the appropriate class rating or type rating by name.
- (2) The privileges referred to in sub-regulation (1) may only be exercised at night if the holder of the winching rating is also the holder of the night rating and the position of the helicopter, its flight attitude and its height can be maintained by reference to external objects, adequately illuminated by helicopter, ground or celestial lighting.
- (3) The privileges of the helicopter winch rating may not be exercised in IMC.

Period of validity of Helicopter winching rating

- **61.23.4** (1) A helicopter winching rating shall be valid for as long as the pilot licence held by the holder of the rating is valid.
- (2) Notwithstanding the provisions of sub-regulation (1), the privileges of the rating may not be exercised by the holder thereof unless he or she complies with the provisions of regulation 61.23.5.

Maintenance of competency for Helicopter Winching Rating

61.23.5 (1) No person may act as PIC of a helicopter, engaged in a winching operation, unless within the 6 months immediately preceding the intended flight he or she has performed a

winch operation in a helicopter of the same class or type by name either independently or under the supervision of an appropriately rated Grade I or Grade II flight instructor.

(2) The pilot's logbook must clearly show each flight engaged in winching operations and if under the supervision of an appropriately rated Grade 1 or Grade 2 flight instructor, that instructor must sign the appropriate logbook entry including the instructor's licence number.

SUBPART 24: HELICOPTER GAME OR LIVESTOCK CULL RATING

Requirements for Helicopter Game or Livestock Cull Rating

- **61.24.1** An applicant for a Helicopter Game or Livestock Cull Rating must
 - (a) hold a valid PPL (Helicopter), CPL (Helicopter) or ATPL (Helicopter);
 - (b) hold the appropriate type rating by name; and
 - (c) have acquired the relevant experience that should at least include completion of not less than 100 hours of flight time as PIC of a helicopter of which not less than five hours of flight time of game or livestock cull operations must have been undertaken under the supervision of an appropriately rated Grade I or Grade II flight instructor who is the holder of a valid Helicopter Game or Livestock Cull Rating, or of a pilot designated in writing for the purpose by the Director;
 - (d) have successfully completed the appropriate training as prescribed in Document SA-CATS 61; and
 - (e) have successfully undergone a skills test demonstrating to a DFE, in a suitable helicopter for which the Helicopter Game or Livestock Cull Rating is sought, the ability to perform the procedures and manoeuvres prescribed in Document SA-CATS 61, with a degree of competency appropriate to the privileges granted to the holder of the Helicopter Game or Livestock Cull Rating.

Application for Helicopter Game or Livestock Cull Rating

- **61.24.2** (1) An application for a Helicopter Game or Livestock Cull Rating must be made to the Director in the appropriate prescribed form as .
- (2) The application must be accompanied by
 - (a) a copy of the relevant page of the logbook of the applicant; and
 - (b) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue a Helicopter Game or Livestock Cull Rating in the appropriate prescribed format if the applicant complies with the prescribed requirements.
- (4) A Helicopter Game or Livestock Cull Rating shall be valid for as long as the pilot licence held by the holder of the rating is valid.

Privileges of Helicopter Game or Livestock Cull Rating

- **61.24.3** (1) The holder of a Helicopter Game or Livestock Cull Rating may act as PIC of a helicopter engaged in game or livestock cull operations, in respect of which he or she holds the appropriate class rating or type rating by name.
- (2) The holder of a PPL (Helicopter) may not exercise the privileges in sub-regulation (1) for hire or reward or while engaged in a commercial air transport operation.
- (3) No person may act as PIC of a helicopter engaged in game or livestock culling operation, unless within the 12 months immediately preceding the intended flight he or she has performed a game or livestock culling operation in a helicopter of the same type by name either independently or under the supervision of an appropriately rated Grade I or Grade II flight instructor.

SUBPART 25: AGRICULTURAL PILOT RATING

Requirements for Agricultural Pilot Rating

- **61.25.1** (1) An applicant for an Agricultural Pilot Rating must
 - (a) hold a valid pilot licence issued in terms of Part 61 or Part 62 in the category aeroplane or helicopter, as applicable, and in the event of acting for remuneration, hold at least a valid CPL (Aeroplane or Helicopter) or a valid Part 96 authorisation, as applicable;
 - (b) hold the appropriate class or type rating;
 - (c) hold a current Pest Control Operator's Certificate issued in terms of the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947);
 - (d) have acquired the experience that include at least completion of not less than 300 hours of flight time, which must include not less than 30 hours in the case of aeroplanes and 10 hours in the case of helicopters, of flight experience in aerial application under supervision; and
 - (e) have undergone the skills test referred to in regulation 61.25.2.
- (2) At least 2 hours of the flight experience referred to in sub-regulation (1) must be dual instruction conducted by the holder of an appropriately rated Grade I or a Grade II flight instructor who shall be the holder of the appropriate category, class or type rating and the Agricultural Pilot Rating. The balance of the prescribed flight experience may be conducted under the supervision of the holder of a valid CPL or ATPL (Aeroplane or Helicopter, as the case may be) with an Agricultural Pilot Rating, designated by the Director in writing for the purpose.

Skills test for Agricultural Pilot Rating

61.25.2 (1) An applicant for an Agricultural Pilot Rating must have demonstrated to an appropriately rated Grade I flight instructor with an Agricultural Pilot Rating, or to a person designated by the Director in writing for the purpose, the ability to perform as PIC of an aeroplane, helicopter or micro light aeroplane, as the case may be, the procedures and

manoeuvres as prescribed in Document SA-CATS 61 with a degree of competency appropriate to the privileges granted to the holder of an Agricultural Pilot Rating.

- (2) The applicant must undergo the skills test referred to in sub-regulation (1) within 30 days immediately preceding the date of application.
- (3) The skills test referred to in sub-regulation (1) must be carried out in an aeroplane, helicopter or micro light aeroplane, as the case maybe, that is equipped with dispensing apparatus and has been certified for agricultural aerial applications in terms of Part 21 or Part 24, as the case may be.

Application for Agricultural Pilot Rating

- **61.25.3** (1) An application for an Agricultural Pilot Rating must be made to the Director in the appropriate prescribed form .
- (2) The application must be accompanied by -
 - (a) a certified true copy of the valid Pest Control Operator's Certificate issued in terms of the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947:
 - (b) a copy of the relevant page of the logbook of the applicant;
 - (c) the skills test report as prescribed in Document SA-CATS 61; and
 - (d) the appropriate fee as prescribed in Part 187.
- (3) The Director must issue an Agricultural Pilot Rating in the prescribed format if the applicant complies with the prescribed requirements.
- (4) An Agricultural Pilot Rating shall be valid for as long as the pilot licence and the pest control operator's certificate held by the holder of the rating, remain valid.

Privileges of Agricultural Pilot Rating

- **61.25.4** (1) The holder of an Agricultural Pilot Rating may act as PIC of an agricultural aircraft, engaged in agricultural aerial applications, in respect of which he or she is the holder of the appropriate class rating or type rating by name.
- (2) The holder of an Agricultural Pilot Rating may not exercise the privilege in sub-regulation (1) unless such pilot has
 - (a) within the 12 months immediately preceding the flight, conducted at least 5 hours of agricultural flight time; or
 - (b) successfully undergone a skills test as contemplated in regulation 61.25.2 and which has been endorsed in the pilot's logbook.
- (3) The holder of a National or PPL (Helicopter) may not exercise the privilege in sub-regulation
- (1) for hire or reward or while engaged in a commercial air transport operation unless the holder

of the National Pilot Licence (Helicopter) is also the holder of the appropriate Part 96 Authorisation.

SUBPART 26: DESIGNATED FLIGHT EXAMINERS

Categories of DFEs

- **61.26.1** (1) The Director may, in writing, designate flight examiners in one or more of the following categories
 - (a) (DFE I;
 - (b) DFE II;
 - (c) DFE III;
 - (d) Approved Person to act as OFE.
 - (e) Authorised Officer;
 - (f) Designated Test Pilot Examiner.
- (2) Any reference to 'examiner' in this Subpart shall mean a reference to each and every category of the above examiners.
- (3) Designation in any of the categories referred to in sub-regulation (1) may be in any of the aircraft categories and will be indicated in parenthesis after the designation by the letters A, H, G, B, P or S for Aeroplane, Helicopter, Glider, Free Balloon, Powered-lift or Airship respectively.
- (4) Examiners may be designated in more than one of the aircraft categories provided they meet the qualification and experience requirements set out in this Subpart for each of the aircraft categories for which authorisation is sought.
- (5)(a)In order to provide for exceptional circumstances, the Director may, on written application, approve a national of a Contracting State to act as an Official Flight Examiner, for a period not exceeding 90 days, for the purposes of licence and instrument rating revalidations, class and type rating revalidations, initial type ratings or differences training.
- (b) Notwithstanding the provisions of paragraph (a), the Director may approve an OFE for a period of up to 12 months where that person is a type rating examiner in the employ of an approved foreign Type Rating Training Organisation.
- (6) In order to be considered for the purposes of sub-regulation (5), the applicant must meet at least the following minimum experience and qualification levels
 - (a) hold the equivalent examiner designation, or qualifications as those prescribed in paragraph (b) of regulation 61.26.3(1), issued by the appropriate authority of a Contracting State acceptable to the Director; or
 - (b) hold at least a valid CPL in the applicable category of aircraft; and;
 - (c) have accumulated not less than 2 000 flying hours, of which at least
 - (i) 100 hours must be instrument flight time;

- (ii) 50 hours must be night flight time; and
- (iii) 100 hours must be as PIC on type;
- (d) in the case of a type rating, the applicant must have accumulated not less than 10 hours as instructor on type;
- (e) in the case where the applicant does not hold the equivalent of a South African Grade II Flight Instructor Rating, such person must act under the supervision of a suitably qualified instructor, an appointed DFE or Authority Authorised Officer or a person designated with examining privileges by the Director.

General requirements for DFEs

61.26.2 An applicant for designation as DFE must -

- (a) hold at least a valid CPL in the applicable category of aircraft and a valid Grade I or Grade II Flight Instructor Rating;
- (b) hold a valid licence and ratings, issued in terms of this Part, at least equal to the licence and ratings for which he or she seeks authorisation to conduct skills tests or proficiency checks and, unless specified otherwise, the appropriate valid flight instructor rating and endorsements;
- (c) be qualified to act as PIC of the aircraft during a skills test or proficiency check;
- (d) meet the applicable experience requirements;
- (e) have attended a flight examiner assessment course, as prescribed in Document SA-CATS 61:
- (f) have conducted at least one skills test in the role of a candidate examiner for which designation is sought, including briefing, conduct of the skills test, assessment of the person to whom a skills test is given, de-briefing and recording documentation. This "Examiner Designation Acceptance Test" must be supervised by Authority Authorised Officer or Person designated with examining privileges or by a DFE appointed for the purpose by the Director;
- (g) be currently active in the field of aviation for which the designation is sought; and
- (h) prior to initial appointment, appear before and be approved by a panel constituted for the purpose by the Director.

Specific Requirements for DFEs

- **61.26.3** (1) An applicant for designation as a DFE III (Aeroplane) must meet the following additional requirements
 - (a) hold at least a valid CPL (Aeroplane) with current instrument rating and Grade II Flight Instructor Rating;
 - (b) have accumulated, in aeroplanes, not less than 1 000 flying hours, of which at least
 - (i) 50 hours must be night flight time;
 - (ii) 50 hours must be instrument flight time; and
 - (iii) 500 hours must be flight instruction time.

- (2) An applicant for designation as a DFE II (Aeroplane) must meet the following additional requirements
 - (a) hold at least a valid CPL (Aeroplane) and a valid Grade I Flight Instructor Rating;
 - (b) have accumulated in aeroplanes not less than 2 000 flying hours, of which at least
 - (i) 250 hours must be in multi-engine aeroplanes;
 - (ii) 100 hours must be instrument flight time; and
 - (iii) 50 hours must be flight instruction time on multi-engine aeroplanes.
- (3) A DFE II (Aeroplane) who requires authorisation to act as examiner for the issue, validation, conversion or re-issue of any of the following ratings
 - (a) multi-engine class or first multi-engine type rating;
 - (b) instrument rating;
 - (c) flight instructor rating;
 - (d) single-engine turbine class rating,

must meet the applicable experience requirements for the particular authorisation as prescribed for a DFE I (Aeroplane).

- (4) An applicant for designation as a DFE I (Aeroplane) must meet the following additional requirements
 - (a) hold a valid ATPL (Aeroplane) and a valid Grade I Flight Instructor Rating;
 - (b) have accumulated, in aeroplanes, not less than 3 000 flying hours, of which at least
 - (i) 500 hours must be in a multi-crew environment;
 - (ii) 100 hours must be instrument flight time;
 - (iii) 500 hours must be in multi-engine aeroplanes;
 - (iv) 200 hours must be flight instruction time on multi-engine aeroplanes;
 - (v) 50 hours must be flight instruction on turbine-engine aeroplanes;
 - (vi) 250 hours must be instrument flight instruction time;
 - (vii) 50 hours must be flight instruction time towards a flight instructor rating; and
 - (viii) 50 hours must be instruction time in a FSTD.
- (5) An applicant for designation to act as an examiner in a skills test or proficiency check in respect of an aeroplane sea/amphibian rating, an aeroplane agricultural pilot rating, a conventional micro light aeroplane rating, or a touring glider rating, must be the holder of the applicable valid rating.
- (6) An applicant for designation as a DFE III (Helicopter) must meet the following additional requirements
 - (a) hold at least a valid CPL (Helicopter) with a current night rating and a valid Grade II flight instructor rating;

- (b) have accumulated, in helicopters, not less than 1 000 flying hours, of which at least
 - (i) 50 hours must be accumulated at night; and
 - (ii) 250 hours must be flight instruction time.
- (7) An applicant for designation as DFE II (Helicopter) must meet the following additional requirements
 - (a) hold at least a valid CPL (Helicopter) with a current night rating and a Grade I flight instructor rating;
 - (b) have accumulated, in helicopters not less than 2 000 flying hours, of which at least 500 hours must be flight instruction time.
- (8) A DFE II (Helicopter), who requires authorisation to act as examiner for the issue, validation, conversion or re-issue of any of the following ratings
 - (a) night rating;
 - (b) type rating for single-engine turbine helicopters;
 - (c) type rating for a helicopter with a MCM in excess of 3 175 kg;
 - (d) multi-engine rating;
 - (e) multi-crew rating;
 - (f) instrument rating; and
 - (g) flight instructor rating,

must meet the applicable experience requirements as prescribed for a DFE I (Helicopter).

- (9) An applicant for designation as a DFE I (Helicopter) must meet the following additional requirements
 - (a) hold a valid ATPL (Helicopter) with a valid instrument rating and a valid Grade I flight instructor rating;
 - (b) have accumulated, in helicopters, not less than 3 000 flying hours, of which at least
 - (i) 500 hours must be accumulated in multi-engine helicopters;
 - (ii) 300 hours must be accumulated in a multi-crew environment
 - (iii) 100 hours must be instrument flight time; and
 - (iv) 1 000 hours must be flight instruction time, of which at least
 - (aa) 100 hours must be flight instruction time on multi-engine helicopters;
 - (bb) 50 hours must be instrument flight instruction time; and
 - (cc) 50 hours must be flight instruction time towards a flight instructor rating.
- (10) An applicant for authorisation to act as examiner in a skills test or a proficiency check in respect of a helicopter sea rating, a helicopter agricultural pilot rating, a helicopter sling load

rating, a helicopter winching rating, or a helicopter game or livestock cull rating, must be the holder of the applicable valid rating.

(11) An applicant for designation as a DFE I and II (Aeroplane or Helicopter) must, prior to conducting a skills test in a FSTD, have conducted a similar test under the supervision of a DFE who has experience at examining skills tests in an FSTD.

Application for Designation as Flight Examiner

- **61.26.4** (1) An application for designation as flight examiner must be made to the Director on the prescribed form and must be accompanied by
 - (a) the original or certified copy of the two most recent pages of the applicant's flying logbook indicating flying experience;
 - (b) proof of holding the required valid licence;
 - (c) proof of the applicant having successfully attended the flight examiner assessment course as prescribed in paragraph (e) of regulation 61.26.2;
 - examiner (d) proof of the applicant having passed the designation acceptance as prescribed in regulation test paragraph (f) of 61.26.2;
 - (e) motivation as to why the applicant believes he or she should be considered for designation; and
 - (f) the applicable fee as prescribed in Part 187.
- (2) An application that contains false or misleading information, including any supporting documentation, must be disqualified.
- (3) If any false or misleading information comes to the attention of the Director, subsequent to the issuing of the designation, the Director may withdraw the designation.
- (4) In addition to the withdrawal, referred to in sub-regulation (3), criminal proceedings may be instituted in terms of Part 185 and any tests that may have been conducted by the applicant may be declared null and void.

Issuing of designation as DFE

- **61.26.5** (1) The Director may issue a designation as flight examiner on the prescribed form if the applicant
 - (a) meets the requirements prescribed in regulations 61.26.2 and 61.26.3;
 - (b) has a good record as a pilot and as flight instructor as far as safety and adherence to the Regulations are concerned; and
 - (c) signs an undertaking to abide by the Code of Conduct for DFEs as compiled by the Director.
- (2) The designation must indicate the period of validity, its category, and any endorsements, restrictions or limitations that may apply.

- (3) An initial designation as examiner is valid for a maximum period of one year from date of designation.
- (4) Where designation is refused, notwithstanding that the applicant meets the requirements, the Director must supply the applicant with written reasons for the refusal.

Re-designation as DFE

- **61.26.6** (1) An application for re-designation as flight examiner must be made on the prescribed form not less than 90 days prior to the beginning of the month in which the designation expires, together with a fee as prescribed in Part 187.
- (2) Submission of such application does not automatically entitle the applicant to continue to exercise the privileges of a DFE after the expiry date.
- (3) The Director may issue the designation if the applicant has attended at least one DFEs conference or workshop under the auspices of the Authority during the preceding 12 months and has been subject to the oversight prescribed in regulation 61.26.7.
- (4) The Director must publish quarterly on the Authority website the names and details of DFEs.

Designation, oversight, suspension and withdrawal of Designation as Flight Examiner

- **61.26.7** (1) A designation to act as flight examiner is a privilege and not a right.
- (2) The examiner conducts tests or checks on behalf of the Authority.
- (3) The Director must exercise oversight at least once a year in respect of each DFE for the purposes of maintenance of flight and safety standards.
- (4) When the Director has reasonable grounds to suspect misconduct, which could compromise flight safety, he or she may suspend or revoke the person's designation as flight examiner.
- (5) The Director must provide written reasons for the suspension, withdrawal, or curtailment of designation as flight examiner.

Privileges and Limitations of DFEs

- **61.26.8** (1) The Director must determine the privileges and limitations of a DFE dependent upon the applicant's qualifications, recent and total flight experience and these must be indicated on the certificate.
- (2) The privileges and limitations will be set out in terms of the following guidelines:
 - (a) In the case of a DFE III (A): to conduct the revalidation check for the revalidation of an instrument rating and the skills test for an initial type rating for full-time

- employees of a Part 135 or Part 121 operator, provided that he or she is a full time employee of the operator and has the appropriate flight instructor endorsements.
- (b) In the case of a DFE III(H): to conduct the revalidation check for the revalidation of an instrument rating and the skills test for an initial type rating for full-time employees of a Part 127 operator , provided that he or she is a full time employee of the operator and has the appropriate flight instructor endorsements.
- (c) In the case of a DFE II(A): to exercise the privileges of a DFE III(A), and to conduct the skills tests/proficiency checks for
 - (i) the issue, revalidation or re-issue of PPL and CPL (Aeroplane);
 - (ii) the issue, revalidation or re-issue of instrument ratings, flight instructor ratings, class ratings and type ratings, provided he or she has the appropriate flight instructor endorsements, and meets the appropriate requirements; and
 - (iii) the revalidation of FSTD instructor authorisations (aeroplane), provided he or she holds a valid FSTD instructor authorisation (aeroplane);
- (d) In the case of a DFE II(H): to exercise the privileges of a DFE III(H), and to conduct the skills tests/proficiency checks for
 - (i) the issue, revalidation or re-issue of PPL and CPL (Helicopter);
 - (ii) the issue, revalidation or reissue of an instrument rating, flight instructor rating, and type ratings for single-pilot, single-engine helicopters with a MCM in excess of 3 175 kg, multi-engine helicopters, and multi-pilot helicopters, provided he or she has the appropriate flight instructor endorsement; and
 - (iii) the revalidation of FSTD instructor authorisations (helicopter), provided he or she holds a valid FSTD instructor authorisation (helicopter);
- (e) In the case of a DFE I(A): to exercise the privileges of a DFE II(A), and to conduct the skills tests/proficiency checks for the issue, revalidation or re-issue of ATPLs (Aeroplane), and a class or type rating for any aeroplane on which he or she is instructor rated;
- (f) In the case of a DFE I(H): to exercise the privileges of a DFE II(H), and to conduct the skills tests/proficiency checks for the issue, revalidation or re-issue of ATPLs (Helicopter) and a type rating for any helicopter on which he or she is instructor rated;
- (g) In the case of a person designated in terms of regulation 61.26.1(4): to exercise the privileges granted to him or her by the Director.
- (h) Whenever a skills test or proficiency check involves a rating for special purposes, the examiner must be the holder of such special purpose rating.

- (3) The privileges listed in sub-regulations (2)(a) to (f) may also be exercised in respect of proficiency checks for the validation or conversion of foreign pilot licences or ratings.
- (4)In the case of a DFE whose medical certificate is revoked, he or she may continue to exercise the privileges of his or her designation in a FSTD for the remaining period of the designation, or as approved in writing by the Director.
- (5) A DFE must limit the number of skills tests and proficiency checks to a maximum of four tests or checks per working day, subject to the limitations of Part 91 or the operator's flight and duty time limitations as filed with the Director.
- (6) A flight test or proficiency check may be conducted by a DFE under the following conditions:
 - (a) When a skills test or a revalidation check is to be conducted in a piston engine aeroplane with a MCM of 5 700 kg or less, or in a helicopter with a MCM of 3175 kg or less, and the DFE holds the category rating but is not rated on the aircraft, the pilot to be tested must have a valid licence and be appropriately rated to act as PIC of the aircraft.
 - (b) In the case where the test is to be executed in aircraft that require a single-engine turboprop class rating or type rating to be endorsed in the pilot licence, the DFE must be instructor rated in that class or type of aircraft.
 - (c) For the purposes of conducting a revalidation check for an instrument rating in a multi-pilot aircraft, where the DFE does not hold the type rating, the flight crew must be appropriately rated and the DFE must hold the appropriate category rating and may not occupy a pilot seat.
 - (d) A DFE occupying a pilot seat as an examiner in an aeroplane with a MCM in excess of 5 700 kg or a helicopter with a MCM in excess of 3175 kg, as the case may be, shall hold a valid type rating for the aircraft in which the test is being carried out.

Crew member status of DFEs

- **61.26.9** (1) When an examiner in an aircraft acts as a required flight crew member or as PIC when conducting a skills test or proficiency check, he or she may do so only by prior written agreement, proof of which must be retained at the point of departure.
- (2) In all other cases the status of the examiner shall be that of an observer.

Conducting of skills test and proficiency check by DFEs

61.26.10 Guidelines in respect of conducting skills tests and proficiency checks are contained in Document SA-CATS 61.

Register of DFEs

- **61.26.11** (1) The Director must keep a register of DFEs and of approved persons to act as flight examiners.
- (2) The register referred to in sub-regulation (1) must contain the following details
 - (a) name;
 - (b) category and privileges of the designation or approval;
 - (c) licences and ratings held; and
 - (d) expiry date.

SUBPART 27: AEROBATICS RATING

Requirements for aerobatics rating (Graduate)

- **61.27.1** (1) An applicant for an aerobatics rating (Graduate) must
 - (a) hold at least a valid PPL (Aeroplane);
 - (b) be a member of an organisation, approved or designated by the Director as an aerobatics sport controlling body, as listed in Document SA-CATS 61:
 - (c) have completed the aerobatics training course prescribed in Document SA-CATS 61:
 - (d) hold the appropriate type rating for the aeroplane; and
 - (e) have passed the skills test demonstrating to an aerobatics examiner, as appointed by an approved or designated aerobatics sport controlling body and ratified by the Director, that he or she can fly a linked sequence of spin, loop, stall turn and roll in a safe and controlled manner.
- (2) The skills test referred to in sub-regulation (1) must have been passed within 30 days immediately preceding the date of application.

Application for aerobatics rating (Graduate)

- **61.27.2** (1) An application for an aerobatics rating (Graduate) must be made to the issuing authority in the appropriate prescribed form .
- (2) The application must be accompanied by the skills test report as prescribed in Document SA-CATS 61 and the prescribed fee, which shall be not more than the fee prescribed in Part 187, if set by an issuing authority other than the Director.
- (3) If the applicant complies with the requirements referred to in regulation 61.27.1, the issuing authority must issue an aerobatics rating (Graduate) in the appropriate format as prescribed in Document SA-CATS 61.

- (4) An aerobatics rating shall be valid for the period of one year from the date of issue, provided the pilot licence of the holder is valid.
- (5) The procedure for the revalidation of an aerobatics rating shall be in accordance with Document SA-CATS 61.
- (6) An aerobatics rating, which has not been revalidated in time, may be re-issued after its holder has applied for, and meets the conditions for its initial issue, as prescribed in this Subpart.

Classes of aerobatics ratings

- **61.27.3** (1) The holder of an aerobatics rating (Graduate) may apply for any of the following classes of aerobatics ratings
 - (a) sportsman;
 - (b) intermediate;
 - (c) advanced; and
 - (d) unlimited.
- (2) An aerobatics rating in any of the classes, referred to in sub-regulation (1), must be issued if the candidate has complied with the appropriate requirements as set out in Document SA-CATS 61.
- (3) The provisions of regulations 61.27.1 and 61.27.2 shall apply with the necessary changes to the application for, and the issue of, the ratings referred to in sub-regulation (1).

Privileges of aerobatics rating

- **61.27.4** (1) The holder of an aerobatics rating may, within the privileges of his or her pilot licence,
 - (a) fly all the manoeuvres, figures and sequences pertaining to the class for which he or she holds the appropriate rating;
 - (b) practise all the manoeuvres, figures and sequences pertaining to the class immediately above the one for which he or she holds a rating;
 - (c) participate in any aerobatics event, sanctioned by an approved or designated aerobatics sport controlling body; and
 - (d) apply for a display authorisation, as contemplated in these Regulations.
- (2) The holder of an aerobatics rating may only exercise the privileges in sub-regulation (1) if he or she is a member in good standing of an approved or designated aerobatics sport controlling body.

PART 62: NATIONAL PILOT LICENSING

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SUBPART 1: GENERAL

Applicability

- **62.01.1** (1) This Part applies to
 - (a) the issuing of pilot licences and ratings for South African national pilots, the privileges and limitations of such licences and ratings, and matters related thereto; and
 - (b) the validation of similar foreign pilot licences and ratings.
- (2) The privileges of a national pilot licence or a validation issued in terms of this Part may only be exercised within the Republic, unless specifically authorised by the appropriate authority of another State to exercise some or all of such privileges within its airspace.

Authority to act as pilot

- **62.01.2** (1) No person shall act as the pilot of an aircraft whilst in or over any part of the Republic or the territorial waters thereof unless such person
 - (a) holds a valid appropriate pilot licence and rating issued in terms of this Part or Part 61; or
 - (b) holds a valid pilot licence and rating validated in terms of this Part or Part 61; or
 - (c) if the aircraft is of a foreign nationality, either
 - (i) holds a valid pilot licence and rating issued by the appropriate authority of the State of Registry, provided such State is a Contracting State; or
 - (ii) has obtained the permission of the Director, if the State of Registry is not a Contracting State.
- (2) The holder of a national pilot licence shall not exercise any privileges other than the privileges granted by the appropriate licence and rating or validation held by such holder.
- (3) The holder of a validation of a foreign pilot licence shall adhere to all the requirements and limitations prescribed by this Part in respect of the holder of a national pilot licence when exercising the privileges of his or her validation as a national pilot.

Part 62 licences

62.01.3 Part 62 licences are -

- (a) a national pilot learner's certificate; and
- (b) a national pilot licence.

Ratings for national pilots and national flight instructors

- **62.01.4** The ratings for national pilots and national flight instructors are
 - (a) a category rating;
 - (b) a class rating;
 - (c) a type rating by name; and
 - (d) a rating for special purposes.

Category ratings

- **62.01.5** The category ratings comprise
 - (a) conventionally controlled microlight aeroplanes;
 - (b) weight-shift controlled microlight aeroplanes;
 - (c) gyroplanes and gyrogliders with a maximum all-up mass of 2 000 kg or less;
 - (d) hang-gliders, including powered hang-gliders;
 - (e) paragliders, including powered paragliders and powered paratrikes;
 - (f) light sport aeroplanes; and
 - (g) touring motor gliders.

Class ratings

- **62.01.6** The class ratings comprise
 - (a) in the case of conventionally controlled microlight aeroplanes
 - (i) conventionally controlled microlight aeroplanes, land;
 - (ii) conventionally controlled microlight aeroplanes, amphibian and sea;
 - (b) in the case of weight-shift controlled microlight aeroplanes
 - (i) a single weight-shift controlled microlight aeroplane, land;
 - (ii) a single weight-shift controlled microlight aeroplane, amphibian and sea;
 - (c) in the case of hang-gliders
 - (i) Novice;
 - (ii) Class A;
 - (iii) Class B;
 - (iv) Class C,
 - (d) in the case of paragliders, powered paragliders and powered paratrikes
 - (i) Basic;
 - (ii) Sport;
 - (e) in the case of gyroplanes –

- (i) gyroplanes, land;
- (ii) gyroplanes, amphibian and sea;
- (iii) gyrogliders;
- (f) in the case of light sport aeroplanes
 - (i) light sport aeroplanes, land;
 - (ii) light sport aeroplanes, amphibian and sea; and
- (g) touring motor gliders.

Type ratings

- **62.01.7** (1) The type ratings for conventionally controlled microlight aeroplanes comprise type ratings by name for conventionally controlled microlight aeroplanes.
- (2) Type ratings for hang-gliders and paragliders comprise
 - (a) Type 1, a hang-glider having a rigid primary structure with pilot weight-shift as the method of primary control;
 - (b) Type 2, a hang-glider having a rigid primary structure with moveable aerodynamic surfaces as the method of control in at least two axis;
 - (c) Type 3, a hang-glider having no rigid primary structure, a paraglider;
 - (d) Type 4, a hang-glider unable to demonstrate the ability to safely take-off or land in no-wind conditions but that is capable of being launched and landed safely by the use of the pilot's legs;
 - (e) Type 5, a hang-glider or a paraglider capable of being foot- launched, and being flown with an engine; a powered hang-glider or powered paraglider; and
 - (f) Type 6, a powered paraglider fitted with a three-wheel undercarriage and steerable nose wheel.
 - (g) Type 7, a powered hang-glider fitted with a three-wheel undercarriage and steerable nose wheel, of which the wing must be a certified hang-gliding wing.
- (3) Type ratings for gyroplanes and gyrogliders comprise a rating by name for each type of gyroplane or gyroglider.
- (4) The type ratings for weight-shift microlight aeroplanes comprise type ratings by name for weight-shift microlights.
- (5) The type ratings for light sport aeroplanes comprise type ratings by name for light sport aeroplanes.

(6) The type ratings for touring motor gliders comprise type ratings by name for touring motor gliders.

Ratings for special purposes

- **62.01.8** (1) The ratings for special purposes in respect of the appropriate licence comprise
 - (a) a tandem rating;
 - (b) a national flight instructor rating;
 - (c) a tug and tow rating;
 - (d) an aero-tow rating for hang-glider pilots;
 - (e) an agricultural pilot rating; and
 - (f) a Part 96 authorisation.
- (2) National flight instructor ratings comprise
 - in the category microlight aeroplanes (conventionally controlled or weight-shift controlled)
 - (i) a Grade C national flight instructor rating (weight-shift controlled /conventionally controlled microlight aeroplane);
 - (ii) a Grade B national flight instructor rating (weight-shift controlled / conventionally controlled microlight aeroplane); and
 - (iii) a Grade A national flight instructor rating (weight-shift controlled / conventionally controlled microlight aeroplane).
 - (b) in the category gyroplanes
 - (i) a Grade C national flight instructor rating (gyroplane);
 - (ii) a Grade b national flight instructor rating (gyroplane); and
 - (iii) a Grade A national flight instructor rating (gyroplane).
 - (c) in the categories hang-gliders and paragliders
 - (i) a national assistant flight instructor rating (hang-gliding/paragliding);
 - (ii) a Grade C national flight instructor rating (hang-gliding/paragliding)
 - (iii) a Grade B national flight instructor rating (hang-gliding/paragliding);
 - (iv) a Grade A national flight instructor rating (hang-gliding/paragliding);
 - (d) in the category light sport aeroplanes
 - (i) a Grade C national flight instructor rating (light sport aeroplane);
 - (ii) a Grade B national flight instructor rating (light sport aeroplane); and
 - (iii) a Grade A national flight instructor rating (light sport aeroplane);
 - (e) In the category touring motor gliders
 - (i) a Grade C national flight instructor rating (touring motor gliders);
 - (ii) a Grade B national flight instructor rating (touring motor gliders); and
 - (iii) a Grade A national flight instructor rating (touring motor gliders).

Competency

- **62.01.9** (1) No holder of a national pilot licence or rating shall exercise the privileges granted by the licence or rating unless such holder maintains competency by complying with the appropriate requirements prescribed in these Regulations.
- (2)(a) The holder of a national pilot licence shall undergo a general proficiency check for each category rating he or she may hold no later than 12 months from the initial issue, and thereafter within a period of 24 months of each previous proficiency check.
- (b) In the case of hang-gliders and paragliders, the annual revalidation of the category rating shall be sufficient to confirm proficiency.
- (c) The proficiency check, or the annual revalidation procedure, as the case may be, shall include a review of applicable regulations, NOTAMs and AICs.
- (d) The provisions of sub-regulations (6) and (7) shall apply with the necessary changes in respect of the annual revalidation procedure.
- (3) Where the holder of a national pilot licence in a particular category who has not maintained competency by passing the general proficiency check or an initial skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence, he or she shall comply with the following requirements
 - (a) in the case where the maintenance of competency has lapsed for less than 24 months, he or she shall, in the same category for which he or she previously held a category endorsement be required to
 - (i) undergo a minimum of two periods of dual training of not less than one hour;
 - (ii) practice at least 1 hour solo flight including 3 take-offs and landings; and
 - (iii) pass a general proficiency check.
 - (b) in the case where the maintenance of competency has lapsed by more than 24 months, but less than 60 months, he or she shall be required to
 - (i) rewrite the Air Law examination;
 - (ii) undergo a minimum of two periods of dual training of not less than one hour:
 - (iii) practice a minimum of 3 hours solo flight including 3 take- offs and landings; and
 - (iv) pass a general proficiency check.
 - (c) in the case where the maintenance of competency has lapsed by more than 60 months he or she shall be required to
 - (i) rewrite the Air Law examination;
 - (ii) undergo a minimum of three periods of dual training of not less than 1 hour each;
 - (iii) practice a minimum of 5 hours solo flight including 5 take-offs and landings;

- (iv) undergo a navigation exercise dual or under supervision of 90 minutes or more including one full stop landing at a point other than departure or final destination, and
- (v) pass a general proficiency check, including a general confirmation of knowledge on all theoretical subjects.
- (4) The proficiency check referred to in sub-regulation (2), may be conducted by a national flight instructor who is the holder of the appropriate category, class or type rating.
- (5) The proficiency check shall consist of a skills test without the need for a cross country flight test as defined in Document SA-CATS 62, to be conducted in an aircraft of the category for which he or she is licensed: Provided that in the case of hang-gliders and paragliders the skills test shall not be a requirement, unless the pilot has not met the annually required number of flights or hours.
- (6) (a) The person conducting the proficiency check shall enter the outcome of the proficiency check in the pilot's logbook and sign it accordingly, and submit the relevant test report to the Director, or to the organisation designated for the purpose in terms of Part 149, as the case may be.
- (b) The test report referred to in paragraph (a) shall be countersigned by the pilot and the pilot concerned shall be provided with a copy thereof.
- (7) Where a pilot fails a proficiency check
 - (a) the pilot shall undergo corrective training with a flight instructor, other than the person who conducted the failed proficiency check, before submitting himself or herself for a retest;
 - (b) no retest shall be conducted without a letter of recommendation by the flight instructor referred to in paragraph (a).
- (8) (a) The holder of a national pilot licence shall pay annually the applicable currency fee as prescribed in Part 187 on the anniversary date of his or her licence.
- (b) The fee shall be paid to the Director, or to the organisation designated for the purpose in terms of Part 149, as the case may, and shall be accompanied by a summary of his or her logbook for the previous 12 months.
- (c) The summary shall be in the format prescribed in Document SA-CATS 62 and be signed, certifying it to be a true reflection of his or her flying experience during the period summarised.
- (d) Notwithstanding the provisions of paragraph (a), no summary shall be required to accompany the currency fee if during the preceding 12 months a six-monthly or annual summary was submitted as part of an application for the issue, renewal or reissue of a rating.
- (9)(a) If the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, suspects that a person, licensed in terms of this Part, has failed to maintain the minimum standard required to exercise the privileges of the national pilot licence or any of the

ratings that he or she holds, the Director or the said organisation must give the holder a reasonable written notice of such suspicion.

- (b) The Director or the said organisation may then require the person to undergo, by a specified date, the skill test or all or some of theoretical knowledge examinations prescribed in this Part in respect of such licence or rating.
- (10) Should the tests or examinations, referred in sub-regulation (9), show that the standard of the licence or rating holder is below that required for the licence or rating concerned, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall suspend the holder from exercising all or any of the privileges of that licence or rating until such time as the holder can show that he or she is again able to meet the skill or theoretical knowledge requirements for that licence or rating.
- (11) If the person, who has been duly notified in terms of sub-regulation (8), fails without reasonable cause to present himself or herself by the specified date to undergo the test or examination prescribed, his or her standard shall be deemed to be below that required for the licence or rating concerned and the provisions of sub-regulation (9) shall apply.
- (12) The holder of a lapsed or expired pilot licence issued in terms of Part 61 or Part 62, or where such holder may not exercise the privileges of his or her licence due to non-compliance with the currency requirement, may for the purpose of renewing his or her licence or rating as contemplated in sub-regulation (2) above, exercise the privileges of the national pilots learner certificate provided for in Part 62 provided that the holder have an appropriate current medical certificate.

Medical fitness

- **62.01.10** (1) An applicant for, or holder of, a national pilot licence shall hold an appropriate valid medical certificate issued in terms of Part 67, and he or she shall submit a copy thereof to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.
- (2) Notwithstanding the provisions of sub-regulation (1), where a national pilot licence is (to be) endorsed only for the category hang-glider or paraglider, its holder shall complete and submit instead a medical fitness certificate, as prescribed in Document SA-CATS 62.
- (3) The medical fitness certificate, prescribed in sub-regulation (2), shall not be older than three months when submitted.
- (4) A new medical fitness certificate, as prescribed in sub-regulation (2), shall be submitted annually together with the annual currency fee as prescribed in regulation 62.01.19.
- (5) The provisions of sub-regulations (2) to (4) shall not apply in the case of the applicant or the licence holder being the holder of any valid medical certificate issued in terms of Part 67.
- (6) The holder of a national pilot licence issued in terms of this Part shall-
 - (a) not exercise the privileges of that licence
 - (i) unless that person –

- (aa) holds an appropriate valid medical certificate or medical fitness certificate, as the case may be; and
- (bb) complies with all medical endorsements on that medical certificate or medical fitness certificate:
- (ii) while he or she is aware of having a medical deficiency that would make him or her unable to meet the medical standards for his or her medical certificate or medical fitness certificate, until he or she has been assessed medically fit again by an aviation medical examiner designated in terms of Part 67 (in the case of the holder of a medical certificate, referred to in sub-regulation (1)), or by a general medical practitioner (in the case of the holder of a medical fitness certificate, referred to in sub-regulation (2)).

Language

62.01.11 The applicant for a national pilot licence, to be issued under this Part, shall have demonstrated his or her ability to use the English language as set out in Document SA-CATS 62.

Logging of flight time

- **62.01.12** (1)(a) The holder of a national pilot licence shall maintain a record of all his or her flight time and instruction time.
- (b) Electronic logbooks may be used, provided that the electronic data is printed onto paper at least every 90 days and the printed pages are filed sequentially in a binder.
- (2) The form and information to be contained in the logbook referred to in sub-regulation (1), and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 62.
- (3) (a) Entries in pilot logbooks shall be made within seven days after the completion of the flight to be recorded.
- (b) Where a pilot is engaged in flight operations away from the base where the pilot logbook is normally kept, the periods specified in paragraph (a) may be extended to 48 hours after return to base.
- (4) Pilot logbooks shall be retained by their holders for at least 60 months from the date of the last flight recorded therein.
- (5) Flight time during which the holder of a national pilot licence is
 - (a) receiving dual instruction, shall be logged as dual flight time and shall include a record of the air exercises undertaken;
 - (b) the designated PIC, shall be logged as pilot-in- command time.
- (6) The holder of a national learner's certificate may log as solo flight time only the flight time when the learner is the sole occupant of the aircraft.

- (7) A national flight instructor shall log the time spent in an aircraft occupying a pilot seat with access to the controls, whilst acting as a flight instructor, as flight instructor time, and may log all flight time whilst acting as such as PIC time.
- (8)(a) A national flight instructor, acting as an examiner while occupying a pilot seat with access to the flight controls, may log all flight time whilst acting as such as PIC, and shall make the entry EXAMINER in the remarks column.
- (b) Such time shall not be logged as flight instructor time.

Crediting of flight time and theoretical knowledge

- **62.01.13** (1) Flight time, entered in a logbook that has been lost or destroyed, shall only be accepted for crediting purposes by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, if the flight time can be substantiated by means acceptable to the Director or the said organisation.
- (2) A person acting as pilot of an aircraft for which he or she does not hold the prescribed qualifications shall not credit that flight time for any purpose, unless he or she is under approved flight instruction.
- (3) An applicant for a national pilot licence or any rating thereto may be credited with any previously acquired flight time in any category of aircraft to the extent recommended by the flight instructor, signing out the skill test report prescribed for the issue of the licence or rating, to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.
- (4) An applicant for a national pilot licence or any rating thereto, who is or who during the five years immediately preceding the application, has been the holder of a pilot licence issued in terms of Part 61 or by the South African Air Force, may be exempted from any cross-country requirement prescribed in this Part, if any, at the discretion of the flight instructor signing out the skill test report prescribed for the issue of the licence or rating.
- (5) Where the holder of a national pilot licence applies for an additional category, class or type rating, he or she may be credited with any theoretical knowledge previously acquired in obtaining the licence or any rating, provided such theoretical knowledge meets or exceeds the standard of theoretical knowledge of the category being applied for, and at the discretion of the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.

Recognition and validation of pilot licences and ratings issued by an appropriate Authority of a Contracting State

62.01.14 (1) (a) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may recognise through validation, a pilot licences and rating issued by or on behalf of an appropriate authority of a Contracting State where the standard of such foreign licence or rating is deemed to be equivalent to, or higher than, the South African qualification being sought, and on the basis of competence by the holder.

- (b) Document SA-CATS 62 contains a list of Contracting States of which the licences and ratings issued by or on behalf of the appropriate authority are deemed to be of a standard equal to, or higher than, those issued by or on behalf of the Authority.
- (2) (a) Validation of foreign licences shall apply for flights in South African aircraft, where such privileges are required for a limited period, not to exceed one year.
- (b) Purposes for which a certificate of validation may be issued include:
 - (i) to exercise the privileges of a national pilot licence in a South African registered aircraft;
 - (ii) to conduct demonstration flights in a South African registered aircraft;
 - (iii) to conduct endorsement training of South African flight crew; or
 - (iv) to participate in sporting or competition events, organised by or under the auspices of sections of the recognised national aero sport body.
- (c) The privileges of the validated foreign licence may not be exercised in commercial air transport operations.
- (3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be may, if deemed necessary, require an applicant for a validation to undergo additional theoretical or practical assessments to ensure compatibility with the relevant South African licensing standards.

Application for and issuing of a validation of a foreign pilot licence and ratings

- **62.01.15** (1) The holder of a licence or rating, similar to, or higher than, a national pilot licence issued in terms of this Part, issued by or on behalf of the appropriate authority of a Contracting State, who desires to exercise the privileges of such licence or rating as PIC of a South African registered aircraft, may apply to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, in the appropriate prescribed form, for a validation of such pilot licence or rating.
- (2) No validation will be considered in terms of sub-regulation (1) if the applicant has
 - (a) been refused a South African pilot licence or validation before; or
 - (b) had a South African pilot licence or validation revoked in the past,

for reasons other than failing a skill test, a proficiency test, or a theoretical knowledge test.

- (3) Where, in the opinion of the Director or the organisation designated for the purpose in terms of Part 149, the requirements for the issue of a pilot licence by a particular Contracting State are lower than those set by South Africa the applicant shall be required to meet the higher requirement before granting a validation.
- (4) A pilot licence and rating issued by or on behalf of an appropriate authority of a Contracting State may be validated by the Director or the organisation designated for the purpose in terms of Part 149–

- (a) subject to the same restrictions which apply to such pilot licence and rating;
- (b) subject to such conditions and limitations as the Director or the designated organisation may deem necessary in the interest of aviation safety;
- (c) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 62; and
- (d) in the appropriate prescribed form as,

but shall not permit privileges in excess of the equivalent South African national pilot licence or rating.

- (5) The application for a validation referred to in sub-regulation (1) shall be accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the pilot licence and rating to which the validation refers;
 - (c) a certified true copy of a valid medical certificate or valid medical fitness certificate;
 - (d) a certified true copy of the radiotelephony certificate (if applicable), or, in the case where the Contracting State does not prescribe such certificate for its licence holders, certified proof that the applicant has passed a practical skill test with an approved radio licence examiner;
 - (e) a summary of the applicant's logbook, certified by the applicant to be a true reflection of the hours flown; and
 - (f) any other document that may have been prescribed in Document SA-CATS 62.
- (6) The minimum knowledge, experience and skill requirements for the issue of a certificate of validation for the various pilot licences and ratings are those prescribed for the South African national pilot licence and associated ratings in Document SA-CATS 62.
- (7) Where a proficiency check or skills test is required, such test shall be undertaken in an aircraft of the class or type, appropriate to the national pilot licence category for which a certificate of validation is sought.
- (8) The holder of a validation issued by the Director or the organisation designated for the purpose in terms of Part 149shall comply with all the applicable provisions prescribed in these regulations.
- (9) None of the privileges of an additional rating may be exercised in terms of the certificate of validation before the appropriate authority as applicable has endorsed such privileges on the applicant's foreign pilot's licence, however, due regard shall be given to the provision of regulation 62.01.14(2)(c).
- (10) The period of validity of a certificate of validation issued by the Director or the organisation designated for the purpose in terms of Part 149 shall be the lesser of
 - (a) twelve months calculated from the date of issue of such certificate of validation by the Director or the organisation designated for the purpose in terms of Part 149; or
 - (b) the period of validity of the pilot licence and rating to which the validation applies.
- (11) In exceptional cases such as demonstration flights or specific instruction on aircraft new for the Republic, the Director or the organisation designated for the purpose in terms of Part

149may consider the validation of a foreign licence to meet short-term operational requirements by exempting the applicant from all or some of the requirements of this Part, subject to conditions set by him, her or it for the particular situation.

Documentation

62.01.16 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall ensure that a national pilot licence and rating is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Register of licences

- **62.01.17** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all national pilot licences and ratings issued or validated in terms of this Part.
- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the licence;
 - (b) date of birth;
 - (c) the postal and residential address of the holder of the licence;
 - (d) the number of the licence;
 - (e) the date on which the licence was issued or validated;
 - (f) particulars of the ratings held by the holder of the licence;
 - (g) the nationality of the holder of the licence; and
 - (h) in the case of a validation, the authority that issued the validated licence or rating.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence or rating is issued or validated.
- (4) The register shall be kept in a safe place at the office of the Director or of the organisation designated for the purpose in terms of Part 149.
- (5) A copy of the register shall be furnished by the Director or the organisation designated for the purpose in terms of Part 149on payment of the appropriate fee as prescribed in Part 187 to any person who requests the copy: Provided that postal and residential addresses may not be divulged to third parties, except to law enforcement officers or on instruction of the Courts.

Aviation training providers

62.01.18 Any *ab initio* training required by this Part shall be provided only by the holder of an ATO approval issued in terms of Part 141.

Payment of currency fee

- **62.01.19** (a) The holder of a national pilot licence shall pay the currency fee as prescribed in Part 187, applicable to the type of licence, on the anniversary date of the licence to either the Authority or to the organisation designated for the purpose in terms of Part 149, as the case may be.
- (b) Where applicable, the payment shall be accompanied by the summary as prescribed by regulation 62.01.9(8).

Radiotelephony certificates

- **62.01.20** (a) A holder of a national pilot licence may also be required to be the holder of a radiotelephony licence as contemplated in section 31 of the Electronic Communications Act, 2005 (Act No. 36 of 2005).
- (b) The requirements for their issue are prescribed in Document SA-CATS 62.

SUBPART 2: NATIONAL PILOT LEARNER'S CERTIFICATE

Requirements for the national pilot learner's certificate

- **62.02.1** (1) An applicant for the issuing of a national pilot learner's certificate shall
 - (a) be not less than 16 years of age, except as provided for in sub-regulation (2);
 - (b)(i) hold a valid medical certificate appropriate to the category of licence ultimately being trained for issued in terms of Part 67; or
 - (ii) in the case of hang-gliding or paragliding, hold a medical fitness certificate, dated not less than three months before the date of application;
 - (c) have successfully completed the training referred to in regulation 62.02.2; and
 - (d) have passed the theoretical knowledge examination referred to in regulation 62.02.3.
- (2) Notwithstanding the provisions of sub-regulation (1), an applicant for the issuing of a national pilot learner's certificate in the category paraglider shall be not less than 14 years of age.

Training

62.02.2 An applicant for the issuing of a national pilot learner's certificate shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.02.3 An applicant for the issuing of a national pilot learner's certificate shall have passed the appropriate written examination as prescribed in Document SA-CATS 62, within 90 days immediately preceding the date of application.

Certificate of competency

62.02.4 (1) If the national pilot learner, in terms of these Regulations, is required to operate radio apparatus while flying solo, a national pilot learner's certificate may be issued to the applicant who is not in possession of a certificate of proficiency (aeronautical), provided that he or she is the holder of a certificate of competency issued in three phases prior to solo flight as prescribed in subparagraphs (b)(i), (ii) and (iii) below by the holder of a flight instructor rating, wherein it is certified that —

- (a) the applicant has undergone basic training in the use of the radio apparatus installed in the aircraft in which he or she is being trained; and
- (b) the applicant is considered capable of operating such radio apparatus satisfactorily to undertake solo flights
 - (i) within the circuit area of the aerodrome or approved site where the training flights originate and terminate;
 - (ii) within the associated general flying area of such aerodrome of approved site;
 - (iii) on cross-country flights.
- (2) The basic training and knowledge requirements to be met shall be based on the communication syllabus prescribed in document SA-CATS 62.
- (3) The certificate of competency referred to in sub-regulation (1) shall be valid for as long as the national learner's certificate is valid.

Application for national pilot learner's certificate

- **62.02.5** (1) An application for the issuing of a national pilot learner's certificate in a category, other than hang-glider or paraglider, shall
 - (a) be made to the Director or the organisation, designated for the purpose in terms of Part 149, as the case may be, in the appropriate prescribed form; and
 - (b) be accompanied by -
 - (i) original or certified proof of -
 - (aa) the identity of the applicant; and
 - (bb) the age of the applicant;
 - (ii) a valid medical certificate appropriate to the category of licence ultimately being trained for issued in terms of Part 67;
 - (iii) if applicable, the valid restricted or higher grade radiotelephony operator's certificate or the certificate of competency referred to in regulation 62.02.4;
 - (iv) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 62.02.3;
 - (v) an application for the appropriate category and type rating;
 - (vi) two recent passport size photographs of the applicant; and
 - (vii) the appropriate fee prescribed in Part 187.
- (2) An application for the issuing of a national pilot learner's certificate in the category hangglider or paraglider shall be made to the holder of a national flight instructor rating under whose supervision the training will take place on the appropriate prescribed form, and accompanied by

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- (a) a completed medical fitness certificate in which the applicant confirms that he or she is medically fit for the intended training; and
- (b) the applicable fee as prescribed in Part 187.

Issuing of national pilot learner's certificate

- **62.02.6** (1) (a) The Director or the organisation, designated for the purpose in terms of Part 149, as the case may be, shall issue a national pilot learner's certificate if the applicant complies with the requirements referred to in regulation 62.02.1.
- (b) Notwithstanding the provisions of paragraph (a), a learner's certificate may be issued by the flight instructor referred to in regulation 62.02.5(2), if the applicant has complied with the provisions of that sub-regulation.
- (2) A national pilot learner's certificate shall be issued in the prescribed format.
- (3) Upon the issuing of a national pilot learner's certificate the holder thereof shall forthwith affix his or her signature in ink in the space on the certificate provided for such purpose.

Period of validity

62.02.7 A national pilot learner's certificate is valid for the period for which the holder thereof is the holder of a valid medical certificate, appropriate to the category of licence ultimately being trained for, issued in terms of Part 67 on condition that the annual currency fee and the application form are submitted to the Director or the organisation designated for the purpose in terms of {Part 149.

Privileges and limitations of national pilot learner's certificate

- **62.02.8** (1) The holder of a valid national pilot learner's certificate shall be entitled to fly solo only for the purpose of training for the applicable national pilot licence or rating
 - (a) in the type of aircraft in which he or she is undergoing training;
 - (b) after being authorised thereto and while under supervision, as prescribed in subregulation (2);
 - (c) without carrying any passengers;
 - (d) in VMC by day;
 - (e) on a flight other than an international flight.

(2)(a) A learner national pilot shall not fly solo unless authority is granted for a flight, or for a sequence of flights, as prescribed in the relevant practical training course syllabus in Document SA-CATS 62, by the holder of a flight instructor rating who is to supervise the solo flight.

- (b) The authority to fly solo shall be in writing and be issued in his or her presence at the time when such flight or sequence of flights is about to commence.
- (3) A learner national pilot shall not fly solo in the circuit unless he or she has successfully completed the practical training and theoretical knowledge examinations as prescribed in Document SA-CATS 62, and his or her logbook has been endorsed to fly solo in the circuit.
- (4) A learner national pilot shall not fly solo outside of the circuit or in the general flying area unless he or she has successfully completed the practical training and theoretical knowledge examinations as prescribed in sub-regulation (3) above and in Document SA-CATS 62, and his or her logbook has been endorsed to do so.
- (5) A learner national pilot shall not fly solo on a cross-country flight unless he has successfully completed the practical training and theoretical knowledge examinations as prescribed in sub-regulations (3) and (4) above and in Document SA-CATS 62, and his or her logbook has been endorsed to do so.
- (6) In the case of the holder of a national pilot learner's certificate in the category hang-glider or paraglider, the provisions of sub-regulation (2) shall be deemed to have been met when the learner has reported to the flight instructor on site to undergo training under the latter's direct supervision in accordance with an approved training manual.
- (7) (a) Except in an emergency, no learner national pilot shall land or take-off in an aircraft from an area other than an aerodrome or an approved site.
- (b) If a learner national pilot does execute an emergency landing in an aircraft in an area other than an aerodrome or an approved site, only the holder of a national pilot licence with the appropriate category and class rating, or another pilot approved for the purpose by the Director or the designated organisation, may fly the aircraft from the area.
- (8) In the case of the holder of a national pilot learner's certificate in the category hangglider, powered hang-glider, paraglider or powered paraglider, the provisions of sub-regulation (2) shall be deemed to have been met when the learner has reported to the flight instructor on site to undergo training under the Instructor's direct supervision in direct line of site in accordance with an approved training manual as contemplated in Document SA-CATS 62.

Crediting of flight time

62.02.9 A learner pilot shall be entitled to be credited in full with all solo and dual instruction flight time towards the total flight time requirement for the initial issue of a national pilot licence in the category in which he or she is undergoing instruction.

SUBPART 3: NATIONAL PILOT LICENCE

Requirements for national pilot licence

- **62.03.1** (1) An applicant for the issuing of a national pilot licence shall
 - (a) be not less than 17 years of age, except as provided for in sub-regulation (2);

- (b) either hold a valid Class 4 or higher class medical certificate issued in terms of Part 67, or in the case of an application in the category hang-glider or paraglider, a valid medical fitness certificate:
- (c) hold a valid national pilot learner's certificate, or a valid pilot licence issued in terms of Part 61; and
- (d) qualify for the issue of at least one of the category ratings, referred to in regulation 62.01.5.
- (2) Notwithstanding the provisions of sub-regulation (1), an applicant for the issuing of a national pilot licence in the category paraglider, hang-glider, powered paraglider and powered paratrike shall be not less than 16 years of age.

Application for national pilot licence

- **62.03.2** An application for the issuing of a national pilot licence shall
 - (a) be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
 - (b) be accompanied by -
 - either a valid Class 4 or higher class medical certificate issued in terms of Part 67, or in the case of an application in the category hang-glider or paraglider, a valid medical fitness certificate;
 - (ii) a valid pilot licence reference number;
 - (iii) original or certified proof that the applicant meets the requirements for the issue of at least one of the category ratings, referred to in regulation 62.01.5;
 - (iv) one passport-sized photograph;
 - (v) the appropriate fee as prescribed in Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that any fee set by the latter may not exceed those prescribed in Part 187; and
 - (vi) a copy of his or her logbook showing all training, and accurately summarised as per Document SA-CATS 62.

Issuing of national pilot licence

- **62.03.3** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a national pilot licence if the applicant complies with the requirements referred to in regulation 62.03.1.
- (2) A national pilot licence shall be issued in the prescribed format.

Period of validity

- **62.03.4** A national pilot licence shall be valid for an indefinite period: Provided that the privileges of the licence shall not be exercised by the holder thereof unless he or she
 - (a) either holds a valid Class 4 or higher class medical certificate issued in terms of Part 67, or in the case of a licence endorsed for the category hang-glider or paraglider only, a valid medical fitness certificate;
 - (b) complies with the provisions of regulation 62.03.6; and
 - (c) holds an appropriate valid category, class or type rating.

Privileges of the national pilot licence

- **62.03.5** (1) The holder of a national pilot licence shall be entitled to act as PIC of an aircraft registered in the Republic of South Africa for which he or she holds the appropriate valid category, class or type rating and which is not engaged in the provision of an air service, but not for reward or remuneration
 - (a) under VMC;
 - (b) by day; and
 - (c) in accordance with the provisions of Part 94.
- (2) The holder of a national pilot licence shall be entitled to exercise the privileges of the licence for any of the special purposes referred to in regulation 62.01.8.
- (3) Notwithstanding the provisions of sub-regulation (1)
 - (a) the holder of a national pilot licence may exercise the privileges of his or her licence for reward or remuneration in an aeroplane operated in terms of Part 96, provided he or she is the holder of a valid Part 96 authorisation issued in terms of Subpart 14 of this Part;
 - (b) the holder of a valid national flight instructor rating may conduct flight training for remuneration under the auspices of an appropriately rated, approved ATO.

Maintenance of competency

- **62.03.6** The holder of a national pilot licence shall not act as PIC of a non-type certificated aircraft, unless he or she
 - (a) meets the maintenance of competency requirements prescribed in this Part for the type of aircraft for which he or she holds a valid category, class or type rating; and
 - (b) has complied with the requirements of regulation 62.01.9.

Requirements for the issue of a category rating

62.03.7 (a) For the applicant for, or the holder of a pilot licence to be issued with a first or an additional category rating, he or she shall meet the requirements for the issue of a class or type rating in that particular category.

(b) When issued with a category rating, a class or type rating in that category is automatically included.

Requirements for the issue of an additional class rating

62.03.8 For the holder of a national pilot licence to be issued with an additional class rating, he or she shall meet the relevant requirements as prescribed in this Part for that particular category and class of aircraft.

Requirements for the issue of an additional type rating

62.03.9 For the holder of a national pilot licence to be issued with an additional type rating, he or she shall meet the requirements for the issue of the particular type rating.

Requirements for the issue of a special purpose rating

62.03.10 For the holder of a national pilot licence to be issued with a special purpose rating, he or she shall meet the requirements for the issue of the particular special purpose rating.

SUBPART 4: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR TYPE RATING BY NAME FOR CONVENTIONALLY CONTROLLED MICROLIGHT AEROPLANES

General

- **62.04.1** For an applicant for, or the holder of, a national pilot licence to be issued with an initial type rating by name for conventionally controlled microlight aeroplanes, he or she shall
 - (a) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
 - (b) have acquired the experience referred to in regulation 62.04.2;
 - (c) have successfully completed the training referred to in regulation 62.04.3;
 - (d) have passed the theoretical knowledge examination referred to in regulation 62.04.4; and
 - (e) have successfully passed the skill test referred to in regulation 62.04.5.

Experience

- **62.04.2** (1) An applicant for the issuing of an initial type rating by name for conventionally controlled microlight aeroplanes shall have completed not less than 25 hours flight time as a pilot of a conventionally controlled microlight aeroplane, of which at least 15 hours shall be solo flight time, and which shall include
 - (a) one dual cross-country flight of a duration of not less than 90 minutes flown at normal cruising speed; and

- (b) one solo cross-country flight of a duration of not less than 90 minutes flown at normal cruising speed.
- (2) The cross-country flights referred to in sub-regulation (1) (a), shall have at least three legs.

Training

62.04.3 An applicant for the issuing of an initial type rating by name for conventionally controlled microlight aeroplanes shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.04.4 An applicant for the issuing of a type rating by name for conventionally controlled microlight aeroplanes shall have passed the appropriate written examinations as prescribed in Document SA-CATS 62.

Skills test

- **62.04.5** (1) An applicant for the issuing of an initial type rating by name for conventionally controlled microlight aeroplanes shall have demonstrated to the holder of a Grade B or Grade A conventionally controlled microlight aeroplane flight instructor rating, or a flight instructor appropriately rated in terms of Part 61, the ability to perform, as PIC of a conventionally controlled microlight aeroplane, the procedures and manoeuvres as prescribed in Document SA-CATS 62, with a degree of competency appropriate to the privileges granted to the holder of a national pilot licence.
- (2) The applicant shall undergo the skills test referred to in sub-regulation (1) within the 12 months of passing the theoretical knowledge examination referred to in regulation 62.04.4 and within the 60 days immediately preceding the date of application.
- (3) The skills test referred to in sub-regulation (1) shall consist of the following:
 - (a) A general skills test of not less than 60 minutes
 - (b) A navigation skills test of not less than 90 minutes flown at normal cruising speed and which includes a full stop landing at a point other than the point of departure.

Crediting of flight time and theoretical knowledge

- **62.04.6** The holder of a licence issued in terms of Part 61 or in terms of this Part as the case may be, endorsed with
 - (a) the category weight-shift controlled microlight aeroplane, may
 - (i) be credited with not more than 15 hours flight time acquired in a weight-shift microlight aeroplane. The additional 10 hours shall consist of –

- (aa) a minimum of 10 hours dual flying; and
- (bb) a minimum of 5 solo take-offs and landings; and
- (ii) have acquired knowledge in the subjects principles of flight and engines and airframes towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category conventionally controlled microlight aeroplanes;
- (b) the category gyroplane or licence issued in terms of Part 61 (helicopter), may
 - (i) be credited with not more than 10 hours flight time acquired in a gyroplane. The additional 15 hours shall consist of
 - (aa) a minimum of 5 hours dual flying; and
 - (bb) a minimum of 10 hours solo flying; and
 - (ii) have acquired knowledge in the subjects engines and air frames and principles of flight towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category conventionally controlled microlight aeroplanes;
- (c) the category light sport aeroplanes or touring motor gliders or licence issued in terms of Part 61 (fixed wing), the hour requirements and the cross-country requirements may be relaxed at the discretion of the flight instructor who conducts the skill test, referred to in regulation 62.04.5.

Application

- **62.04.7** (1) An application for the issuing of a category, class or type rating for conventionally controlled microlight aeroplanes shall
 - (a) be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate form as prescribed by the Director; and
 - (b) be accompanied by -
 - (i) a valid licence reference number or a valid application for the issue of such licence:
 - (ii) certified proof that the requirements prescribed in regulation 62.04.1 have been complied with; and
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case

may be, provided that the fees set by the latter may not exceed those prescribed in Part 187.

- (2) An applicant for the issue of an additional type rating by name for conventionally controlled microlight aeroplanes shall
 - (a) undergo a proficiency test with a Grade C, B or A-instructor with the appropriate type or class rating wherein a high standard of vital action drill shall be required;
 - (b) with the examiner at the dual controls or under direct supervision in the case of a single-seater aeroplane, perform at least 3 take-offs and 3 landings and any other exercise considered necessary; and
 - (c) pass the technical examinations as prescribed in Document SA-CATS 62.

Issuing of a category, class or type rating by name

- **62.04.8** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a class rating or type rating by name for conventionally controlled microlight aeroplanes if the applicant complies with the requirements referred to in regulation 62.04.7.
- (2) A class rating or type rating by name for conventionally controlled microlight aeroplanes shall be issued in the prescribed format .
- (3) An applicant for the issuing of an open class rating for conventionally controlled microlight aeroplanes shall have completed not less than 200 hours flight time as a pilot of a conventionally controlled microlight aeroplane, and hold at least five type ratings by name for conventionally controlled microlight aeroplanes.

Period of validity

62.04.9 A class rating or type rating by name for conventionally controlled microlight aeroplanes shall be valid for as long as the national pilot licence itself remains valid, with the proviso that the privileges of the class rating or type rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 62.04.11.

Privileges and limitations of the class rating or type rating for conventionally controlled microlight aeroplanes

- **62.04.10** (1) The holder of a class rating or type rating by name for conventionally controlled microlight aeroplanes shall be entitled to act as PIC of the conventionally controlled microlight aeroplane for which he or she is rated by name, or of any conventionally controlled microlight aeroplane for which he or she holds the appropriate class rating, provided it is not operated for the provision of an air service
 - (a) within Class F and Class G airspace;
 - (b) within controlled airspace unless -

- (i) prior permission has been obtained from the responsible ATSU to enter such airspace;
- (ii) such two-way radio communication as the said unit may require, is established;
- (iii) continuous radio watch is maintained; and
- (iv) while within an aerodrome traffic zone, the appropriate radio position reporting procedure is complied with.
- (2) Notwithstanding the provisions of sub-regulation (1)
 - (a) the holder of a class rating for conventionally controlled microlight aeroplanes shall familiarise himself or herself with any type of conventionally controlled microlight aeroplane that he or she has not flown previously, before undertaking a flight in such aeroplane; and
 - (b) the holder of a class rating or type rating by name for conventionally controlled microlight aeroplanes may exercise the privileges of his or her rating for remuneration in an aircraft operated in terms of Part 96, provided he or she is the holder of a valid Part 96 authorisation issued in terms of Subpart 14 of this Part.

Maintenance of competency

62.04.11 The holder of a class rating or type rating by name for conventionally controlled microlight aeroplanes shall not act as PIC of a conventionally controlled microlight aeroplane –

- (a) unless he or she -
 - (i) has acted as PIC of a conventionally controlled microlight aeroplane for a minimum of 5 hours in the 12 months immediately preceding the intended flight. Such minimum flight time may include flights undertaken by the pilot whilst receiving training appropriate to the type of conventionally controlled microlight aeroplane; or
 - (ii) has passed a skills test with an appropriately rated flight instructor within the three months immediately preceding the intended flight; and
 - (iii) has submitted an application for the renewal of the applicable category rating to the Director or the body designated for the purpose as the case may be.
- (b) if transporting a passenger, unless he or she has, within the 90 days immediately preceding the flight on which such passenger is to be transported, executed not less than three take-offs and three landings in a conventionally controlled microlight aeroplane;
- (c) submitted an application for the renewal of the applicable category rating to the Director or the body designated for the purpose as the case may be.

SUBPART 5: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR TYPE RATING BY NAME FOR WEIGHT-SHIFT CONTROLLED MICROLIGHT AEROPLANES

General

- **62.05.1** For the applicant for, or the holder of, a national pilot licence to be issued with a type rating by name for weight-shift controlled microlight aeroplanes, he or she shall
 - (a) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
 - (b) have acquired the experience referred to in regulation 62.05.2;
 - (c) have successfully completed the training referred to in regulation 62.05.3;
 - (d) have passed the theoretical knowledge examination referred to in regulation 62.05.4; and
 - (e) have successfully passed the skill test referred to in regulation 62.05.5.

Experience

- **62.05.2** (1) An applicant for the issuing of an initial type rating for weight-shift controlled microlight aeroplanes shall have completed not less than 25 hours flight time as a pilot of a weight-shift controlled microlight aeroplane, of which at least 15 hours shall be solo flight time, and which shall include
 - (a) one dual cross-country flight of a duration of not less than 90 minutes flown at normal cruising speed; and
 - (b) one solo cross-country flight of a duration of not less than 90 minutes flown at normal cruising speed.
- (2) The cross-country flights referred to in sub-regulation (1) shall have at least three legs.

Training

62.05.3 An applicant for the issuing of an initial type rating by name for weight-shift controlled microlight aeroplanes shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.05.4 An applicant for the issuing of an initial type rating for weight-shift controlled microlight aeroplanes shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.

Skills test

62.05.5 (1) An applicant for the issuing of type rating by name for weight-shift controlled microlight aeroplanes shall have demonstrated to the holder of a Grade B or Grade A weight-shift controlled microlight aeroplane flight instructor rating the ability to perform, as PIC of a weight-shift controlled microlight aeroplane, the procedures and manoeuvres as prescribed in Document SA-CATS 62, with a degree of competency appropriate to the privileges granted to the holder of a national pilot licence.

- (2) The applicant shall undergo the skills test referred to in sub-regulation (1) within the 12 months of passing the theoretical knowledge examination referred to in regulation 62.05.4 and within the 60 days immediately preceding the date of application.
- (3) The skills test referred to in sub-regulation (1) shall consist of the following:
 - (a) A general skills test of not less than 60 minutes;
 - (b) A navigation skills test of not less than 90 minutes flown at normal cruising speed and which includes a full stop landing at a point other than the point of departure.

Crediting of flight time and theoretical knowledge

62.05.6 (1) The holder of a licence issued in terms of Part 61 or in terms of this Part endorsed with –

- (a) the category conventionally controlled microlight aeroplane, light sport aeroplane, touring motor glider or licence issued in terms of Part 61 (fixed wing), shall
 - (i) complete a minimum of 10 hours dual flying; and
 - (ii) complete a minimum of 5 solo take-offs and landings; and
 - (ii) have acquired knowledge in the subjects principles of flight and engines and airframes towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category weight-shift controlled microlight aeroplanes;
 - (b) the category gyroplane or licence issued in terms of Part 61 (helicopter), shall complete
 - (i) the training as required in terms of regulation 62.05.2 provided that the cross country requirements may be relaxed at the discretion of the instructor conducting the test as referred to in 62.05.5; and
 - (ii) have acquired knowledge in the subjects engines and air frames and principles of flight towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category weight-shift controlled microlight aeroplanes;
 - (c) the category hang-gliding, an applicant with extensive experience of hang-gliding, shall
 - (i) complete a minimum of 10 hours dual flying; and
 - (ii) complete a minimum of 5 solo take-offs and landings; and
 - (ii) have acquired knowledge in the subjects principles of flight and engines and airframes towards the theoretical knowledge requirements prescribed for the

endorsement of a national pilot licence endorsed for the category weight-shift controlled microlight aeroplanes.

Application

- **62.05.7** (1) An application for the issuing of a type rating by name or a class rating for weight-shift controlled microlight aeroplanes shall
 - (a) be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
 - (b) be accompanied by
 - (i) a valid licence reference number or a valid application for the issue of such licence:
 - (ii) certified proof that the requirements prescribed in regulation 62.05.1 have been complied with; and
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that the fees set by the latter shall not exceed those prescribed in Part 187.
- (2) An applicant for the issue of an additional type rating by name for weight-shift controlled microlight aeroplanes shall
 - (a) undergo a skills test with a Grade C, B or A-instructor with the appropriate type or class rating wherein a high standard of vital action drill shall be required;
 - (b) with the instructor at the dual controls or under direct supervision in the case of a single-seater aeroplane, perform at least 3 take-offs and 3 landings and any other exercise considered necessary; and
 - (c) pass the technical exams as prescribed in Document SA-CATS 62.

Issuing of open class rating or type rating

- **62.05.8** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a class rating for weight-shift controlled microlight aeroplanes if the applicant complies with the requirements referred to in regulation 62.05.7.
- (2) A class rating for weight-shift controlled microlight aeroplanes shall be issued in the prescribed format .
- (3) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a type rating by name or a class rating for weight-shift controlled microlight aeroplanes if the applicant complies with the requirements prescribed in regulation 62.05.7.

- (4) A type rating by name and a class rating for weight-shift controlled microlight aeroplanes shall be issued in the prescribed format .
- (5) An applicant for the issuing of open class rating for weight shift controlled microlight aeroplanes shall have completed not less than 200 hours flight time as a PIC of a weight shift controlled microlight aeroplane, and hold at least five type ratings by name for weight shift controlled microlight aeroplanes.

Period of validity

62.05.9 A class rating for weight-shift controlled microlight aeroplanes shall be valid for as long as the national pilot licence itself remains valid, with the proviso that the privileges of the class rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 62.05.11.

Privileges and limitations of the class rating for weight-shift controlled microlight aeroplanes

- **62.05.10** (1) The holder of a class rating for weight-shift controlled microlight aeroplanes shall be entitled to act as PIC of any weight-shift controlled microlight aeroplane, provided it is not operated for the provision of an air service
 - (a) within Class F and Class G airspace;
 - (b) within controlled airspace and only if -
 - (i) prior permission has been obtained from the responsible ATSU to enter such airspace;
 - (ii) such two-way radio communication as the said unit may require, is established;
 - (iii) continuous radio watch is maintained; and
 - (iv) while within an aerodrome traffic zone, the appropriate radio position reporting procedure is complied with while such microlight aeroplane is within such aerodrome traffic zone.
- (2) Notwithstanding the provisions of sub-regulation (1), the holder of a class rating for weight-shift microlight aeroplane
 - (a) shall familiarise him- or herself with any weight-shift microlight aeroplane that he or she has not flown previously, before undertaking a flight in such microlight aeroplane; and
 - (b) may exercise the privileges of his or her rating for remuneration in an aircraft operated in terms of Part 96, provided he or she is the holder of a valid Part 96 authorisation issued in terms of Subpart 14 of this Part.

Maintenance of competency

- **62.05.11** The holder of a class rating for weight-shift controlled microlight aeroplanes shall not act as PIC of a weight-shift controlled microlight aeroplane
 - (a) unless he or she -
 - (i) has acted as PIC of a weight-shift controlled microlight aeroplane for a minimum of 5 hours in the 12 months immediately preceding the intended flight. Such

- minimum flight time may include flights undertaken by the pilot whilst receiving training appropriate to the type of weight-shift controlled microlight aeroplane; or
- (ii) has passed a skills test with an appropriately rated flying instructor within the three months immediately preceding the intended flight; and
- (iii) submitted an application for the renewal of the applicable category rating to the Director or the body designated for the purpose as the case may be;
- (b) if transporting a passenger, within the 90 days immediately preceding the flight on which such passenger is to be transported, executed not less than three take-offs and three landings in a weight-shift controlled microlight aeroplane.

SUBPART 6: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR TYPE RATING FOR GYROPLANES

General

62.06.1 (1) For the holder of a national pilot licence to be issued with a category rating for gyroplanes and a first class rating and first type rating by name for gyroplanes, he or she shall –

- (a) hold at least a valid restricted certificate of proficiency (aeronautical);
- (b) have acquired the experience referred to in regulation 62.06.2;
- (c) have successfully completed the training referred to in regulation 62.06.3;
- (d) have passed the theoretical knowledge examination referred to in regulation 62.06.4; and
- (e) have passed the skill test referred to in regulation 62.06.5.
- (2) An applicant for an additional type rating by name in the category gyroplanes shall
 - (a) be the holder of a valid national pilot licence endorsed for the category gyroplane;
 - (b) have successfully completed the appropriate training referred to in regulation 62.06.3
 - (c) have passed the theoretical knowledge examination referred to in regulation 62.06.4; and
 - (d) have passed the skills test referred to in regulation 62.06.5 in the type of gyroplane for which the additional type rating is sought.
- (3) An applicant for an additional class rating in the category gyroplanes shall meet the requirements for a gyroplane type rating by name in the class for which the rating is sought.

Experience

- **62.06.2** (1) An applicant for the issuing of a first type rating in the category gyroplane shall have completed not less than 30 hours flight time as a pilot of a gyroplane, of which at least 15 hours shall be solo flight time, and which flight time shall include
 - (a) one dual cross-country flight of a duration of not less than 90 minutes, flown at normal cruising speed; and
 - (b) one solo cross-country flight of a duration of not less than 90 minutes, flown at normal cruising speed:

Provided that the cross-country requirement shall not apply in the case of a type rating to be endorsed 'tethered flight only'.

(2) The cross-country flights, referred to in sub-regulation (1), shall consist of at least three legs.

Training

62.06.3 An applicant for the issuing of a type rating by name in the category gyroplane shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.06.4 An applicant for the issuing of a type rating by name in the category gyroplane shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.

Skills test

- **62.06.5** (1) An applicant for the issuing of a type rating by name in the category gyroplane shall have demonstrated to the holder of a gyroplane flight instructor rating, the ability to perform as PIC of the gyroplane the procedures and manoeuvres as prescribed in Document SA-CATS 62, with a degree of competency appropriate to the privileges granted to the holder of a national pilot licence.
- (2) The applicant shall undergo the skills test referred to in sub-regulation (1) within 90 days of passing the theoretical knowledge examination referred to in regulation 62.06.4 and within the 60 days immediately preceding the date of application.
- (3) The skills test referred to in sub-regulation (1) shall consist of the following:
 - (a) A general skills test of not less than 60 minutes;
 - (b) A navigation skills test of not less than 90 minutes flown at normal cruising speed and which includes a full stop landing at a point other than the point of departure.

Crediting of flight time

62.06.6 The holder of a licence issued in terms of Part 61 or in terms of this Part as the case may be –

- (a) may be credited with not more than 5 hours solo and 5 hours dual flight time, the additional 20 hours shall consist of
 - (i) a minimum of 10 hours dual flying
 - (ii) a minimum of 10 hours solo flting; and

(b) shall have acquired knowledge in the subjects principles of flight and engines and airframes towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category gyroplane.

Application

62.06.7 An application for the issuing of a type rating by name in the category gyroplanes shall

- (a) be made to the Director or to the organisation, designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
- (b) be accompanied by -
 - (i) a certified true copy of the applicant's national pilot licence;
 - (ii) certified proof that the requirements prescribed in regulation 62.06.1 have been complied with; and
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that the fees set by the latter shall not exceed the fees prescribed in Part 187.

Issuing of gyroplane type rating

- **62.06.8** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a gyroplane type rating by name if the applicant complies with the requirements referred to in regulation 62.06.7.
- (2) A gyroplane type rating by name shall be issued in the prescribed format.

Period of validity

62.06.9 A gyroplane type rating by name shall be valid for as long as the national pilot licence itself remains valid, with the proviso that the privileges of the type rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 62.06.11.

Privileges and limitations

- **62.06.10** (1) The holder of a gyroplane type rating by name shall be entitled to act as PIC of any gyroplane for which he or she holds a type rating by name, provided it is not operated for the provision of an air service
 - (a) within Class F and Class G airspace;
 - (b) within controlled airspace if -
 - (i) prior permission to enter such airspace has been obtained from the responsible ATSU:
 - (ii) such two-way radio communication is established, as the said unit may require;
 - (iii) a continuous radio watch is maintained; and
 - (iv) while in an aerodrome traffic zone, the appropriate radio position reporting procedures is complied with, while such gyroplane is within such airspace.
- (2) Where a gyroplane rating was issued with the restriction 'tethered flight only', its holder shall not exercise its privileges in free flight.

Maintenance of competency

62.06.11 The holder of a type rating by name in the category gyroplanes, shall not act as PIC of a gyroplane unless he or she –

- (a) has acted as PIC of a gyroplane for a minimum of 10 hours in the 12 months immediately preceding the intended flight. Such minimum flight time may include flights undertaken by the pilot whilst receiving training appropriate to the gyroplane; or
- (b) has passed a practical flight test with an appropriately rated flying instructor within the three months immediately preceding the intended flight; and
- (c) if transporting a passenger, he or she has, within the 90 days immediately preceding the flight on which such passenger is to be transported, has spent not less than one hour in the circuit exercising take-offs and landings in a gyroplane; and
- (d) has submitted an application for the renewal of the applicable category rating to the Director or the body designated for the purpose as the case may be.

SUBPART 7: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR ADD-ON RATING FOR HANG-GLIDERS

General

- **62.07.1** (1) (a) A hang-glider rating may be issued in four classes:
 - (i) Novice;
 - (ii) Class A;
 - (iii) Class B:
 - (iv) Class C:
- (b) The classes of the hang-glider rating, referred to in paragraph (a) may be issued with the tandem add-on rating and the rating and endorsements prescribed in Document SA-CATS 62.
- (2) For the holder of a national pilot licence to be issued with a category rating and the Novice Class rating for hang-gliders he or she shall
 - (a) have acquired the applicable experience referred to in regulation 62.07.2;
 - (b) have successfully completed the applicable training referred to in regulation 62.07.3;
 - (c) have passed the applicable theoretical knowledge examination referred to in regulation 62.07.4; and
 - (d) have passed the applicable skill test referred to in regulation 62.07.5.
- (3) The requirements for the upgrading from Novice to Class A, from Class A to Class B, and from Class B to Class C, are those prescribed in this Subpart for the issue of the relevant ratings.

Experience

- **62.07.2** (1) An applicant for the issuing of any of the class ratings or add-on ratings, referred to in regulation 62.07.1(1) in the category hang-glider shall have the experience as prescribed in Document SA-CATS 62.
- (2) In the case of an applicant with extensive experience in weight-shift controlled microlight aeroplanes, the testing officer may at his or her discretion reduce the prescribed flight-time requirements.
- (3) In the case of an applicant with a foreign licence from a similar internationally recognised body for hang-gliding and paragliding, the testing officer may at his or her discretion reduce the prescribed flight time requirements.

Training

62.07.3 An applicant for the issuing of any of the class ratings or add-on ratings, referred to in regulation 62.07.1(1), in the category hang-glider, shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.07.4 An applicant for the issuing of any of the class ratings or add-on ratings referred to in regulation 62.07.1(1), in the category hang-glider, shall have passed the appropriate technical knowledge examination as prescribed in Document SA-CATS 62.

Skills test

- **62.07.5** (1) An applicant for the issuing of any of the class ratings or add-on ratings referred to in regulation 62.07.1(1) in the category hang-glider, shall have demonstrated to the holder of a hang-glider flight instructor rating, the ability to perform as PIC of the hang-glider, the procedures and manoeuvres as prescribed in Document SA-CATS 62 with a degree of competency appropriate to the privileges granted to the holder of a national pilot licence who is the holder of the respective class or add-on rating.
- (2) The applicant shall undergo the skill test referred to in sub-regulation (1) within 90 days of passing the theoretical knowledge examination referred to in regulation 62.07.3 and within the 60 days immediately preceding the date of application.

Application for hang-glider class or add-on rating

- **62.07.6** (1) An application for the issuing of a hang-glider class or add-on rating shall
 - (a) be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form;
 - (b) be accompanied by -
 - (i) certified summary of the applicant's pilot logbook;
 - (ii) application for, or certified copy of the applicant's national pilot licence;
 - (iii) a valid medical fitness certificate as prescribed in Document SA-CATS 62;

- (iv) the completed training proficiency card as prescribed in Document SA-CATS 62;
- (v) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 62.07.3;
- (vi) original or certified proof that the applicant has passed the skills test referred to in regulation 62.07.5;
- (vii) the appropriate fee as prescribed in Part 187; and
- (viii) any additional information that may be requested by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.
- (2) An applicant for the Class B hang-glider rating shall have been the holder of a Class A rating for at least three months.
- (3) An applicant for the Class C hang-glider rating shall have been the holder of a Class B rating for at least six months.
- (4) An applicant for the tandem rating shall be the holder of a valid Class C hang-glider rating.

Issuing of hang-glider class or add-on rating

62.07.7 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's national pilot licence with the appropriate hang-glider class or add-on rating, if the applicant complies with the requirements prescribed in regulation 62.07.6.

Period of validity

62.07.8 A hang-glider class or add-on rating shall be valid for an indefinite period, provided its holder is the holder of a valid national pilot licence and maintains competency as prescribed in regulation 62.07.10.

Privileges and limitations

- **62.07.9** (1) The holder of a hang-glider Novice class rating shall be permitted to act as PIC of a hang-glider under the supervision of an appropriately rated flight instructor or the holder of a valid hang-glider Class C rating under the conditions as prescribed in Document SA-CATS 62.
- (2) The holder of a national pilot licence endorsed for the category hang-glider and a Class A, B, or C rating, shall be entitled to act as PIC of a hang-glider for which he or she holds the appropriate class rating and add-on rating within Class F and Class G airspace, provided it is not operated for the provision of an air service.

Maintenance of competency

62.07.10 (1) The holder of a hang-glider class or add-on rating shall not act as PIC of a hang-glider for which he or she holds the appropriate rating unless he or she –

- (a) in the 12 months immediately preceding the intended flight has acted as PIC of a hangglider for a minimum of –
 - (i) 10 flights and 1 hour, in the case of a Class A rating;
 - (ii) 10 flights and 5 hours, in the case of a Class B rating; or
 - (iii) 20 flights, 15 hours and 50 km total cross-country flight distance, in the case of a Class C rating; or
- (b) has passed a practical flight test with an appropriately rated flying instructor within the 3 months immediately preceding the intended flight.
- (2) Such minimum flight time, referred to in sub-regulation (1)(a), may include flights undertaken by the pilot whilst receiving training appropriate to the type of hang-glider.

Type ratings

- **62.07.11** (1) The listing in regulation 62.01.7(2) prescribes the various types of hang-gliders in use that may be flown by the holder of any of the class ratings, referred to in regulation 62.07.1(1).
- (2) Before attempting to fly a new type, the pilot must undergo the familiarisation training prescribed in Document SA-CATS 62.
- (3) The details of such familiarisation training must be endorsed in the pilot's logbook by the instructor who had conducted the training with the pilot.

SUBPART 8: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR ADD-ON RATING FOR PARAGLIDERS

General

- **62.08.1** (1) A paraglider rating may be issued with a tandem rating in two classes
 - (a) Basic; and
 - (b) Sport;
- (2) For the holder of a national pilot licence to be issued with a category rating and the Basic Class rating for paragliders, he or she shall
 - (a) have acquired the applicable experience referred to in regulation 62.08.2;
 - (b) have successfully completed the applicable training referred to in regulation 62.08.3;
 - (c) have passed the applicable theoretical knowledge examination referred to in regulation 62.08.4; and
 - (d) have passed the applicable skill test referred to in regulation 62.08.5.
- (3) The applicant for the upgrading from the Basic Class to the Sport Class paraglider rating shall have held the Basic Class rating for at least six months and have acquired the experience prescribed in regulation 62.08.2.

- (4) The applicant for the paraglider tandem rating shall
 - (a) have held a paraglider rating for at least 24 months;
 - (b) be the holder of a sport class rating;
 - (c) hold an appropriate medical fitness certificate, as prescribed in Document SA-CATS 62; and
 - (d) have acquired the experience prescribed in regulation 62.08.2.

Experience

62.08.2 An applicant for the issuing of any of the class or add-on ratings, referred to in regulation 62.08.1(1), in the category paraglider, shall have the experience as prescribed in Document SA-CATS 62.

Training

62.08.3 An applicant for the issuing of any of the class or add-on ratings referred to in regulation 62.08.1(1) in the category paraglider, shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.08.4 An applicant for the issuing of any of the class or add-on ratings, referred to in regulation 62.08.1(1), in the category paraglider shall have passed the appropriate theoretical knowledge examination as prescribed in Document SA-CATS 62.

Skills test

- **62.08.5** (1) An applicant for the issuing of any of the class or add-on ratings, referred to in regulation 62.08.1(1) in the category paraglider shall have demonstrated to the holder of a paraglider flight instructor rating, the ability to perform as PIC of the paraglider, the procedures and manoeuvres as prescribed in Document SA-CATS 62, with a degree of competency appropriate to the privileges granted to the holder of a national licence who is the holder of the respective class rating.
- (2) The applicant shall undergo the skills test referred to in sub-regulation (1) within 90 days of passing the theoretical knowledge examination referred to in regulation 62.08.3 and within the 60 days immediately preceding the date of application

Application for paraglider class or add-on rating

- **62.08.6** An application for the issuing of a paraglider class or add-on rating shall
 - (a) be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate form as prescribed by the Director;
 - (b) be accompanied by -
 - (i) certified summary of the applicant's pilot logbook;
 - (ii) certified copy of the applicant's national pilot licence;
 - (iii) a valid medical fitness certificate as prescribed in Document SA-CATS 62;

- (iv) the completed training proficiency card as prescribed in Document SA-CATS 62;
- (v) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 62.08.3;
- (vi) original or certified proof that the applicant has passed the skill test referred to in regulation 62.08.4;
- (vii) the appropriate fee as prescribed in Part 187; and
- (viii) any additional information as may be requested by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.

Issuing of paraglider rating

62.08.7 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's national pilot licence with the appropriate paraglider class or add-on rating, if the applicant complies with the requirements prescribed in regulation 62.08.6.

Period of validity

62.08.8 A paraglider class or add-on rating shall be valid for an indefinite period, provided its holder is the holder of a valid national pilot licence and maintains competency as prescribed in regulation 62.08.10.

Privileges and limitations

- **62.08.9** (1) The holder of a valid national pilot licence, endorsed for the category paragliders, shall be permitted within Class F and Class G airspace to act as PIC of a paraglider for which he or she holds the appropriate class rating, provided it is not operated for the provision of an air service.
- (2) The holder of a paraglider basic rating shall be permitted to fly
 - (a) unassisted at basic-graded sites;
 - (b) under supervision of a the holder of valid paraglider Sport Class rating when flying at a site requiring additional supervision according to the rules governing the site; and
 - (c) for the first 80 flights, only basic- and intermediate-rated paragliders.
- (3) The holder of a paraglider Sport Class rating shall be permitted
 - (a) to fly any paraglider, other than a tandem-class paraglider: Provided that heavy pilots may fly approved tandem gliders solo, on condition that they meet the minimum specified mass range;
 - (b) to fly at all sites after local site requirements have been met; and
 - (c) to conduct training as a national assistant flight instructor (paraglider) under the supervision of an appropriately rated national flight instructor (paraglider).
- (4) The holder of a paraglider tandem rating shall be permitted to act as PIC of a paraglider while carrying a passenger, provided that, for the first 20 flights, any passenger shall be the holder of a valid national pilot licence endorsed for the paraglider category.

- (5) Notwithstanding the provisions of sub-regulations (2), (3) and (4), the organisation designated for the purpose in terms of Part 149 may set minimum experience requirements for specific types and models of paragliders, to be published as an addendum in that organisation's approved operations manual.
- (6) The grading of sites, referred to in sub-regulations (2) and (3), and the setting of the rules governing such sites, shall be the responsibility of the organisation designated for the purpose in terms of Part 149.

Maintenance of competency

- **62.08.10** (1) The holder of a national pilot licence, endorsed for the category paraglider shall not act as PIC of a paraglider for which he or she holds the appropriate class rating unless he or she has
 - (a) in the 12 months immediately preceding the intended flight acted as PIC of a paraglider for a minimum of
 - (i) 20 flights and 5 hours, in the case of a Basic Class rating;
 - (ii) 40 flights and 10 hours, in the case of a Sport Class rating; or
 - (iii) 20 flights and 5 hours on tandem gliders, in the case of a tandem rating, in addition to having met the competency requirements for a Sport Class rating.
 - (b) passed a practical flight test with an appropriately rated national flying instructor within the 3 months immediately preceding the intended flight.
- (2) The minimum flight time referred to in sub-regulation (1)(a) may include flights undertaken by the pilot whilst receiving training appropriate to the type of paraglider.

SUBPART 9: REQUIREMENTS FOR THE ISSUE OF A NATIONAL FLIGHT INSTRUCTOR RATING

General

- **62.09.1** (1) The applicant for the issue of a national flight instructor rating shall
 - (a) be the holder of a valid national pilot licence issued in terms of this Part;
 - (b) hold at least a valid Class 4 medical certificate issued in terms of Part 67;
 - (c) have acquired the experience referred to in regulation 62.09.2;
 - (d) have successfully completed the training referred to in regulation 62.09.3;
 - (e) have passed the theoretical knowledge examination referred to in regulation 62.09.4;
 - (f) have undergone the skills test referred to in regulation 62.09.5; and
 - (g) in the case of a national flight instructor rating (hang-glider or paraglider), be the holder of a valid recognised certificate of competency in first aid.
- (2) The applicant for the issue of a national assistant flight instructor (paraglider) shall in addition to the requirements of sub-regulation (1) be the holder of a valid Sport Class rating.

- (3) The applicant for the issue of a national flight instructor (paraglider) shall in addition to the requirements of sub-regulation (1) have been the holder of a valid Sport Class rating for at least 12 months.
- (4) Notwithstanding the provisions of sub-regulation (1), where a national flight instructor rating is to be endorsed only for the category hang-glider or paraglider, the applicant shall complete and submit instead a medical fitness certificate, as prescribed in Document SA-CATS 62.

Experience

62.09.2 The applicant for the issuing of a national flight instructor rating shall have the following experience –

- (a) in the case of the holder of a type or class rating for conventionally controlled microlight aeroplanes, a category rating for weight-shift controlled microlight aeroplanes or a type rating for light sport aeroplanes or gyroplanes –
 - (i) for a Grade C national flight instructor rating a minimum of 200 hours of flight time is required of which at least 100 hours PIC shall be on weightshift controlled microlight aeroplanes, conventionally controlled microlight aeroplanes, gyroplanes or light sport aeroplanes in the applicable category; and
 - (aa) in the case of weight-shift controlled microlight aeroplanes: at least 10 hours of practical instruction patter and 30 hours of class teaching are required;
 - (bb) in the case of conventionally controlled microlight aeroplanes at least 10 hours of practical instruction patter and 30 hours of class teaching are required; or
 - (cc) in the case of light sport aeroplanes or gyroplanes at least 15 hours of practical instruction patter and 30 hours of class teaching are required.
 - (ii) for a Grade B national flight instructor rating: at least six months experience as a Grade C weightshift controlled microlight aeroplane, conventionally controlled microlight aeroplane, gyroplane or light sport aeroplane flight instructor and not less than 200 hours of flight instruction of which at least 100 hours shall be on a weightshift controlled microlight aeroplane, conventionally controlled microlight aeroplane, gyroplane or light sport aeroplane in the applicable category;
 - (iii) for a Grade A national flight instructor rating: at least three years experience as a Grade B weightshift controlled microlight aeroplane, conventionally controlled microlight aeroplane, gyroplane or light sport aeroplane flight instructor and not less than 500 hours of flight instruction time, of which at least 300 hours of flight instruction time shall be on a weightshift controlled microlight aeroplane, conventionally controlled

microlight aeroplane, gyroplane or light sport aeroplane in the applicable category;

- (b) in the case of the holder of a category rating for hang-gliders
 - (i) for an assistant national flight instructor rating (hang-glider):
 - (aa) hold at least a Class B hang-glider rating; and
 - (bb) have held a hang-glider rating, including a learner's certificate, for at least one year;
 - (ii) for a national flight instructor rating (hang-glider) Grade A or Grade B
 - (aa) have held a Class C hang-glider rating for at least 12 months;
 - (bb) have logged at least 200 flights or 100 hours air time; and
 - (cc) have gained practical experience in flight instruction by either
 - (A) attending an official hang-glider instructor course; or
 - (B) having attended an approved hang-glider flight instructor course and observing and assisting an appropriately rated hang-glider flight instructor whilst actively conducting training on training slopes for at least 10 days;
 - (iii) for a national flight instructor rating (hang-glider) Grade C
 - (aa) have held a Class C hang-glider rating for at least 12 months;
 - (bb) have attended an instructor Grade C course; and
 - (cc) have completed the practical requirements as prescribed in Document SA-CATS 62.
- (c) in the case of the holder of a category rating for paragliders
 - (i) for a national assistant flight instructor (paragliding) have at least one year paragliding experience; and
 - (ii) for a national flight instructor (paragliding) Grade A or Grade B
 - (aa) have paraglider flight experience for at least two years;
 - (bb) have been the holder of the Sport Class rating for at least twelve months;
 - (cc) have logged at least 300 flights and 100 hours flight time and have either
 - (A) gained practical experience by observing and assisting at least three approved paraglider training schools on training slopes for at least 20 days; or

- (B) attended an approved paraglider flight instructor course and observing and assisting an appropriately rated paraglider flight on training slopes for at least 10 days;
- (iii) for a national flight instructor rating (paragliding) Grade C
 - (aa) have held a Sport Class paraglider rating for at least 12 months;
 - (bb) have attended an instructor Grade C course; and
 - (cc) have completed the practical requirements as prescribed in Document SA-CATS 62
- (d) in the case of touring motor gliders
 - (i) for a Grade C national flight instructor rating:
 - (aa) hold a national pilot licence endorsed with the category touring motor gliders;
 - (bb) have no less than 200 hours flight time as PIC with experience gained in not less than 6 months; and
 - (cc) undergo 10 hours of practical instruction patter and 30 hours of class teaching;
 - (ii) for a Grade B national flight instructor rating:
 - (aa) have no less than 300 hours flight time and 200 flights as a Grade C instructor, of which 25 flight hours and 50 flights may be accumulated and accredited as instructor I terms of Part 68, and 25 flight hours and 50 flights in any other Part 62 category or in terms of a pilot licence issued in terms of Part 61;
 - (bb) the total experience must be gained in not less than 12 months;
 - (iii) for a Grade A national flight instructor rating:
 - (aa) hold a touring motor glider class rating;
 - (bb) have no less than 500 flight hours accumulated as a Grade C or Grade B Instructor, or in terms of a pilot instructors rating issued in terms of Part 61.

Training

62.09.3 The applicant for the issuing of a national flight instructor rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.09.4 The applicant for the issuing of a national flight instructor rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.

Skills test

- **62.09.5** (1) The applicant for the issuing of a national flight instructor rating shall have demonstrated to an appropriately rated flight instructor the ability to perform as a flight instructor the procedures and manoeuvres as prescribed in Document SA-CATS 62 for the category of aircraft for which the instructor rating is sought, with a degree of competency appropriate to the privileges granted to the holder of a national flight instructor rating.
- (2) For the purpose of sub-regulation (1), an appropriately rated flight instructor shall mean
 - (a) in the case of a national flight instructor (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes):
 - (i) For Grade C, the holder of a Grade A national flight instructor rating (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes, as the case may be);
 - (ii) for a Grade B rating, the holder of a Grade A national flight instructor rating (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes, as the case may be);
 - (iii) for a Grade A rating, a designated examiner with a weight shift controlled microlight aeroplane or conventionally controlled microlight aeroplane rating;
 - (b) in the case of a national flight instructor (hang-glider):
 - (i) the holder of a national flight instructor rating (hang-glider); or
 - (ii) the National Safety and Training Officer of SAHPA;
 - (c) in the case of a national flight instructor (paraglider, motorised paraglider, motorised paratrike):
 - for a Grade C rating, two holders of a Grade B national flight instructor rating with a paraglider, motorised paraglider, or motorised paratrike rating, as applicable;
 - (ii) for a Grade B rating, the holder of a Grade A national flight instructor rating with a paraglider, motorised paraglider, or motorised paratrike rating, as applicable;
 - (iii) for a Grade A rating, a designated examiner with a paraglider, motorised paraglider, or motorised paratrike rating, as applicable;
 - (d) in the case of a national flight instructor (gyroplane, light sport aeroplane or touring motor glider) the holder of an instructor rating with designated examiner status, as prescribed in Subpart 15 of Part 62.
- (3) The skills test, referred to in sub-regulation (1), shall be demonstrated in an aircraft of the category for which the national flight instructor rating is sought.

(4) The applicant shall undergo the skill test, referred to in sub-regulation (1), within 12 months of passing the theoretical knowledge examination, referred to in regulation 62.09.4, and within the 90 days immediately preceding the date of application.

Application

62.09.6 An application for the issue of a national flight instructor rating shall be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form, and be accompanied by –

- (a) a valid licence reference number, held by the applicant;
- (b) the original or certified proof that the applicant has passed the theoretical knowledge examination, referred to in regulation 62.09.4;
- (c) the skill test report as prescribed in Document SA-CATS 62; and
- (d) the appropriate fee as prescribed in Part 187 of the Regulations.

Issuing of the national flight instructor rating

62.09.7 The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue the appropriate national flight instructor rating if the applicant complies with the requirements referred to in regulation 62.09.1, on the appropriate prescribed form.

Privileges and limitations

- **62.09.8** The holder of a valid national flight instructor rating shall be entitled to conduct flight instruction for reward under the auspices of an appropriately rated ATO, approved in terms of Part 141, in a non-type certificated aircraft for which he or she holds a valid category rating and class rating or type rating by name, as the case may be, to the extent of the privileges of the particular national flight instructor rating held as follows
 - (a) in the case of a Grade C national flight instructor (weight shift controlled microlight aeroplane or conventionally controlled microlight aeroplane, gyroplane or light sport aeroplane), under direct supervision by a Grade B or Grade A instructor
 - to conduct ab initio training on only those aeroplanes for which he or she holds an instructor conversion on type as per Document SA-CATS 62:
 - (ii) give lectures;
 - (iii) give type ratings;
 - (b) in the case of a Grade B national flight instructor (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes, gyroplanes or light sport aeroplane)
 - to exercise the privileges of a Grade C national flight instructor (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes or light sport aeroplane);

- (ii) to authorise the holder of a national pilot learner's certificate for his or her first solo flight;
- (iii) to conduct flight tests for the issuing of a type or class rating for which he or she holds the appropriate category and type or class rating;
- (iv) sign application forms and certificates of competency;
- (v) supervise Grade C instructors;
- (vi) in the case of weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes: may apply for a class rating (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes) for instruction on obtaining a Bgrade rating if he or she is the holder of instructor type ratings on at least 5 microlight types and has a minimum of 200 hours of instruction on weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes; and
- (vii) to conduct additional type conversion training for the holder of a national pilots licence or instructor rating;
- (c) in the case of a Grade A national flight instructor (conventionally controlled or weightshift controlled microlight aeroplane)
 - (i) to exercise the privileges of a Grade B national flight instructor (conventionally controlled or weightshift controlled microlight aeroplane);
 - (ii) to conduct the training (including patter training) and undertake the duties in conducting the skills test required for a Grade A, Grade B, or Grade C national flight instructor (microlight aeroplane);
 - (iii) to undertake the duties in conducting the skills test as prescribed in regulation 62.14.6.
- (d) in the case of a national assistant flight instructor (hang-glider)
 - (i) assist with *ab initio* training conducted by an approved hang-gliding training organisation, such as ground-handling exercises, ground-skimming flight.;
 - (ii) assist in presenting theoretical lectures; and
 - (iii) supervise flights by the holders of a Novice Class rating;
- (e) in the case of a national assistant flight instructor (paraglider)
 - (i) assist with ab initio training conducted by an approved paragliding training organisation, such as ground-handling exercises, groundskimming flight, etc;
 - (ii) assist in presenting theoretical lectures; and
 - (iii) supervise flights by the holders of a Basic Class rating;

- (f) in the case of a Grade A national flight instructor (light sport aeroplane and gyroplane)
 - (i) to exercise the privileges of a Grade B national flight instructor (light sport aeroplane and gyroplane);
 - (ii) to conduct the training (including patter training) required for a Grade C, Grade B or Grade A national flight instructor (light sport aeroplane and gyroplane);
 - (iii) to conduct the training required for other special ratings.
- (g) in the case of a Grade C national flight instructor (touring motor glider)
 - (i) assist with *ab initio* training conducted by an approved touring motor glider training organisation, such as ground-handling exercises, daily-and pre-flight inspection training, duty officer training, etc;
 - (ii) provide official introductory flights;
 - (iii) conduct and supervise basic upper-air flight training exercises with post solo holders of national pilots learners certificate, under the supervision of a Grade B national flight instructor;
- (h) in the case of a Grade B national flight instructor (touring motor gliders)
 - (i) exercise all the privileges of a Grade C national flight instructor (touring motor glider);
 - (ii) assist in presenting theoretical lectures;
 - (iii) mark exams and sign application forms;
 - (iv) conduct and supervise basic and medium advanced upper-air flight training, including launch and landings;
 - (v) conduct theoretical and technical examinations, perform a skills test, perform type rating training and issue additional type ratings;
 - (vi) supervise and authorize follow-on solo flights for the holders of national learners certificates, within gliding distance of the airfield, or outside with specific permission from a national flight instructor;
- (i) in the case of a Grade A national flight instructor (touring motor glider)
 - (i) exercise all the privileges of a Grade B national flight instructor (touring motor glider);
 - (ii) conduct all stages of flight training;
 - (iii) authorize first solo flights of holders of national learners certificates;
 - (vi) conduct all levels of theoretical training;
 - (v) conduct theoretical and technical examinations, a skill test, and issue a class rating; and
 - (iv) may take full authority at the training organization in the absence of an appointed chief flight instructor.

Renewal

62.09.9 To renew a national flight instructor rating –

- (a) in the case of either a Grade A, Grade B or Grade C national flight instructor (weight shift controlled microlight aeroplanes or conventionally controlled microlight aeroplanes, or light sport aeroplanes) the holder of the rating shall
 - (i) have attended an approved flight instructor refresher seminar as prescribed in Document SA-CATS 62 within the two years immediately preceding the date of expiry of such rating;
 - (ii) have given not less than 50 hours of flight instruction within the three years preceding the date of expiry, of which not less than 25 hours shall have been within the 12 months immediately preceding the date of expiry of such rating; and
 - (iii) have undergone the skills test referred to in regulation 62.09.5 within 90 days prior to date of expiry;
 - (b) in the case of a national flight instructor (gyroplane), the holder shall
 - (i) have attended an approved flight instructor refresher seminar, as prescribed in Document SA-CATS 62, within the two years immediately preceding the date of expiring of such rating;
 - (ii) have given not less than 30 hours of flight instruction within the three years preceding the date of expiry, of which not less than 25 hours shall have been given within the 12 months immediately preceding the date of expiry of such rating; and
 - (iii) within the 90 days immediately preceding the date of expiry of the rating have undergone the skills test referred to in regulation 62.09.5;
 - (c) in the case of a national assistant flight instructor (hang-glider) within the 90 days immediately preceding the date of expiry of the rating have undergone the skills test referred to in regulation 62.09.5;
 - (d) in the case of a national flight instructor (hang-glider)
 - (i) have attended a flight instructor refresher seminar, as prescribed in Document SA-CATS 62, within the two years immediately preceding the date of expiring of such rating;
 - (ii) have logged a minimum of 20 flights, 15 hours and 50 km total cross-country flight distance during the previous 12 months; and
 - (iii) either
 - (aa) have given not less than 30 hours of flight instruction within the three years preceding the date of expiry, of which not less than 25

- hours shall have been given within the 12 months immediately preceding the date of expiry of such rating; or
- (bb) within the 90 days immediately preceding the date of expiry of the rating have undergone the skills test referred to in regulation 62.09.5;
- (iv) be in possession of a First Aid certificate valid for the period of the rating;
- (e) in the case of a national flight instructor (paraglider)
 - (i) have attended a flight instructor refresher seminar, as prescribed in Document SA-CATS 62, within the two years immediately preceding the date of expiring of such rating;
 - (ii) have logged a minimum of 40 flights and 10 hours within the 12 months immediately preceding the date of expiry of such rating;
 - (iii) either
 - (aa) have given not less than 30 hours of flight instruction within the three years preceding the date of expiry, of which not less than 25 hours shall have been given within the 12 months immediately preceding the date of expiry of such rating; or
 - (bb) within the 90 days immediately preceding the date of expiry of training have undergone the skills test referred to in regulation 62.09.5; and
 - (iv) be in possession of a First Aid certificate valid for the period of the rating;
- (f) in the case of a national flight instructor (touring motor glider)
 - (i) have attended an approved flight instructor refresher seminar, as prescribed in Document SA-CATS 62, within the two years immediately preceding the date of expiring of such rating;
 - (ii) have logged within 12 months immediately preceding the date of expiry, a minimum of 5 flight hours and a total 10 flights PIC;
 - (iii) have provided 30 hours flight time instruction in the three years preceding the expiry date, of which 15 hours of flight time should be within 12 months immediately preceding the date of expiry of such rating; and
 - (iv) within the 90 days immediately preceding the date of expiry of the rating have undergone the skill test referred to in regulation 62.09.5.

Period of validity

62.09.10 A national flight instructor rating shall be valid for a period of two years, calculated from the end of the month following the date of issue, reissue, or upgrade, or from the date of

expiry of the rating if such rating is revalidated in accordance with the provisions of regulation 62.09.10.

Crediting of flight time and theoretical knowledge

- **62.09.11** (1) A national flight instructor is entitled to be credited with all instruction time acquired while giving flight instruction for the purpose of initial flight training, instructor training, conversion to type training, safety training as defined in Part 141, and training towards various ratings, towards a higher grade flight instructor rating, or towards the revalidation or reissue of any existing rating in that category class or type, provided he or she holds the appropriate category, class or type rating.
- (2) Notwithstanding the provisions of this regulation, the holder of a national flight instructor rating endorsed for the category weight-shift microlight aeroplane or gyroplane, shall
 - (a) be entitled to be credited with not more than 100 hours flight time acquired in a weight-shift microlight aeroplane or gyroplane, as the case may be, towards the total flight time experience prescribed for the endorsement of a national flight instructor rating for the category light sport aeroplane;
 - (b) have acquired knowledge in the subjects principles of flight and engines and airframes towards the theoretical knowledge requirements prescribed for the endorsement of a national flight instructor rating endorsed for the category light sport aeroplane.
- (3) Notwithstanding the provisions of this regulation, the holder of a national flight instructor rating endorsed for the category conventionally controlled microlight aeroplane shall
 - (a) be entitled to be credited with not more than 150 hours flight time acquired in a conventionally controlled microlight aeroplane towards the total flight time experience prescribed for the endorsement of a national flight instructor rating for the category light sport aeroplane;
 - (b) have acquired knowledge in the subjects engines and air frames and principles of flight towards the theoretical knowledge requirements prescribed for the endorsement of a national flight instructor rating endorsed for the category light sport aeroplane.
- (4) Notwithstanding the provisions of this regulation, the holder of a flight instructor rating endorsed for the category touring motor gliders, shall
 - (a) be entitled to be credited with not more than 150 hours flight time acquired in a touring motor glider, towards the total flight time experience prescribed for the issuing of a flight instructor rating endorsed for the category light sport aeroplane.
 - (b) be credited with acquired knowledge in all subjects, towards the theoretical knowledge requirements prescribed for the issuing of a national flight instructor rating endorsed for the category light sport aeroplane.

SUBPART 10: REQUIREMENTS FOR THE ISSUE OF A NATIONAL POST MAINTENANCE AND REPAIR TEST FLIGHT RATING AND A NATIONAL TEST FLYING RATING

General

- **62.10.1** (1) No person shall act as test pilot of an aircraft unless he is the holder of a valid pilot's licence with a test pilot's rating.
- (2) Test flights may only be performed by suitably rated pilots; this means rated on the aircraft within a class or on type and rated as a test pilot.
- (3) (a) A test flight will be required as referred to below.
- (b) Note that a systems acceptance flight, as defined below, is not a test flight and therefore the PIC does not require a test pilot rating.
- (c) However, he must be rated as PIC for the class and type of aircraft.
- (d) All test flights must be done in line with the manufacturer's requirements.

Requirements

- **62.10.2** (1) An applicant for a national pilot licence with a post maintenance test flight rating in the categories weight shift controlled microlights, conventionally controlled microlights, light sport aeroplanes, touring motor gliders, gliders and gyroplanes shall
 - (a) hold at least a valid national pilot licence;
 - (b) be the holder of the appropriate aircraft category endorsement;
 - (c) be the holder of the appropriate aircraft class rating in that category;
 - (d) have at least 300 hours total flight time of which not less than 200 hours must be PIC in the category for which a test pilot rating is applied for;
 - (e) have acquired the experience referred to in regulation 62.10.3;
- (2) An applicant for a national pilot licence with a test pilot rating in the categories weight shift controlled microlight aeroplanes, conventional controlled microlight aeroplanes, light sport aeroplanes, touring motor gliders, gliders and gyroplanes shall
 - (a) hold at least a valid national pilot licence;
 - (b) be the holder of the appropriate aircraft category endorsement;
 - (c) be the holder of the appropriate aircraft class rating in that category;
 - (d) have at least 700 hours total flight time of which not less than 500 hours must be PIC in the category for which a test pilot rating is applied for;
 - (e) have acquired the experience referred to in regulation 62.10.3;
- (3) Notwithstanding the provisions of sub-regulations (1) and (2), a holder of a Grade I or II test pilot rating issued under Part 61 shall have the same rights and privileges as a pilot issued with a test pilot rating under Part 62 for the categories light sport aeroplanes, conventionally controlled microlight aeroplanes and touring motor gliders, but shall expressly exclude the categories weight shift controlled microlight aeroplanes and gyroplanes.

Experience

62.10.3 An applicant shall –

- (a) in the case of an application for a post maintenance test flight rating, attend the basic test flying techniques course as set out in Document SA-CATS 62;
- (b) In the case of an application for a test pilot rating, attend the advanced test flying techniques course as set out in Document SA-CATS 62.

Application

- 62.10.4 An application for the issuing of a post maintenance test flight rating or a test pilot rating shall be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate form and accompanied by
 - (a) the appropriate fee prescribed in Part 187; and
 - (b) a copy of his or her logbook, duly summarised, showing the required flying experience.

Issuing

62.10.5 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's National Pilot Licence with either a test pilot rating or a post maintenance test flight rating if the applicant complies with the requirements referred to in regulation 62.10.2.

Privileges and limitations

- **62.10.6** (1) The holder of a post maintenance test flight rating shall be entitled to act as PIC of an aircraft, in a category for which the pilot has a post maintenance test flight rating to conduct a post maintenance test flight, or proving flights.
- (2) The holder of a test pilot rating shall be entitled to act as PIC of an aircraft to conduct test flights, post maintenance test flights, and initial test flights.

SUBPART 11: REQUIREMENTS FOR THE ISSUE OF TUG AND TOW RATINGS

General

62.11.1 An applicant for the issuing of a tug or tow rating shall –

- (a) be the holder of a valid aeroplane pilot licence issued under Part 61, or a national pilot licence issued in terms of this Part, with the appropriate class rating or type rating for the tug aeroplane to be used;
- (b) have acquired the experience referred to in regulation 62.11.2;
- (c) have successfully completed the training referred to in regulation 62.11.3;
- (d) have passed the theoretical knowledge examination referred to in regulation 62.11.4; and
- (e) have successfully passed the skills test referred to in regulation 62.11.5.

Experience

- **62.11.2** (1) An applicant for a tug or tow rating shall have acquired in the category for which the tug or tow rating is sought, at least 100 hours as PIC.
- (2) Notwithstanding the provisions of sub-regulation (1), the hour requirement may be reduced to 50 hours as PIC of a microlight aeroplane or light sport aeroplane if the applicant is the holder of a valid tug pilot rating issued in terms of Part 61 and is the holder of a valid pilot licence.

Training

62.11.3 An applicant for tug or tow rating shall complete successfully under supervision of an appropriately rated flight instructor or a person designated for the purpose in writing by the Director or an organisation designated for the purpose in terms of Part 149, as the case may be a minimum of 10 aero-tows.

Theoretical knowledge examination

62.11.4 An applicant for a tug or tow rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.

Skills test

62.11.5 An applicant for a tug or tow rating shall within the 30 days immediately preceding the date of application have demonstrated to an appropriately rated flight instructor or a person designated for the purpose in writing by the Director or an organisation designated for the purpose in terms of Part 149, as the case may be, the ability to satisfactorily execute the skills as prescribed in Document SA-CATS 62.

Hang-gliding tug endorsement

- **62.11.6** (1) No pilot with a tug rating for conventionally controlled microlights may tow a hang-glider without a valid hang-gliding tug endorsement issued by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.
- (2) For a hang-gliding tug endorsement, the pilot will be required to demonstrate at least 10 hang-gliding tugs, of which five will be in moderately thermic conditions.

- (3) A pilot with a tug rating hang-gliding endorsement may tow a hang-glider, provided the pilot of the hang-glider is the holder of a valid national pilot licence in the category hang-gliders with a valid aero-tow rating.
- (4) A hang-gliding tug endorsement may be obtained independently of the tug rating, but the holder of a hang-gliding tug endorsement may not tow anything other than a hang-glider.

Application

62.11.7 An applicant for a tug or tow rating shall submit together with his or her application, a certificate signed by an appropriately rated flight instructor, confirming that the applicant has passed the theoretical knowledge examination and skills test, referred to in regulations 62.11.4 and 62.11.5 respectively, and is considered to be fit to act as PIC of a while towing a hang-glider.

Issuing

62.11.8 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's pilot licence with the tug or tow rating if the applicant complies with the requirements prescribed regulation in 62.11.1.

Privileges and limitations

62.11.9 The holder of a pilot licence with the tug or tow rating shall be entitled to act as PIC of an aircraft of an appropriate type by name or in the appropriate class.

SUBPART 12: REQUIREMENTS FOR THE ISSUE OF AN AGRICULTURAL PILOT RATING

General

- **62.12.1** (1) The requirements for the issue of an agricultural pilot rating shall, with the necessary changes, be the requirements for the issue of an agricultural pilot rating prescribed in Part 61.
- (2) Any reference to the Director shall be deemed to include a reference to an organisation designated for the purpose in terms of Part 149, if applicable.

SUBPART 13: REQUIREMENTS FOR THE ISSUE OF A HANG-GLIDER AERO-TOW ENDORSEMENT

General

- **62.13.1** An applicant for the issuing of a hang-glider aero-tow endorsement shall
 - (a) be the holder of a valid national pilot licence, endorsed for the category hang-gliding;
 - (b) have acquired the experience referred to in regulation 62.13.2; and

(c) have successfully passed the written theoretical knowledge examination referred to in regulation 62.13.3.

Experience

62.13.2 An applicant for the issuing of a hang-glider aero-tow endorsement shall have satisfactorily completed under the supervision of an appropriately rated flight instructor 10 aero-tows, of which at least 5 were completed in moderately thermal conditions.

Theoretical knowledge examination

62.13.3 An applicant for the issuing of a hang-glider aero-tow endorsement shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.

Application

- **62.13.4** An applicant for the issuing of a hang-glider aero-tow endorsement shall
 - (a) be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
 - (b) be accompanied by-
 - (i) the original or certified copy of the applicant's valid pilot licence, endorsed for the category hang-glider;
 - (ii) a certificate of competency signed by a suitably licensed and rated flight instructor stating that the applicant has met the requirements of regulations 62.13.2 an 62.13.3; and
 - (iii) the applicable fee as prescribed in Part 187 of the Regulations.

Issuing

62.13.5 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue on the appropriate form a hang-glider aero-tow endorsement if the applicant complies with the requirements of regulation 62.13.1.

Privileges and limitations

62.13.6 The holder of a valid hang-glider aero-tow endorsement shall be entitled to act as PIC of a hang-glider for which he or she holds the appropriate rating whilst under tow from an amateur-built or production-built aircraft, including a microlight aeroplane, certified for tug operations.

Period of validity

62.13.7 A hang-glider aero-tow endorsement shall be valid for the period for which the holder thereof is the holder of a valid national pilot licence.

Maintenance of competency

- **62.13.8** The holder of a hang-glider aero-tow endorsement shall not exercise the privileges thereof unless he or she
 - (a) during the six months immediately preceding the flight has carried out at least 5 aero-tows; or
 - (b) is under the supervision of an appropriately rated flight instructor.

SUBPART 14: REQUIREMENTS FOR THE ISSUE OF A PART 96 AUTHORISATION

General

- **62.14.1** (1)(a) Part 96 regulates the commercial operation of non-type certificated aircraft.
- (b) Non-type certificated aircraft, issued with an authority to fly in terms of Part 24 do not meet ICAO standards and, therefore, may only be operated within the borders of the Republic, unless specifically authorised by the responsible authority for the foreign airspace.
- (2)(a) As non-type certificated aircraft may not be operated in international commercial air transport, ICAO requirements in respect of pilot licensing do not apply.
- (b) National authorities may regulate such operations for domestic operations.
- (3) In accordance with paragraphs (1) and (2) above, the Director or the body designated for the purpose as the case may be, may authorise the holder of a valid appropriate private or national pilot licence to conduct commercial operations with non-type certificated aircraft in terms of Part 96 and this Part on conditions prescribed by the Director.
- (4) The requirements for a Part 96 authorisation as applicable to the aircraft types which may be operated by a pilot licensed in terms of Part 62 are set out in this Subpart: Provided that this Subpart shall not apply to operations of paragliders, hang-gliders, or the powered versions thereof.

Requirements for a Part 96 authorisation

- **62.14.2** An applicant for the issuing of a Part 96 authorisation shall
 - (a) be not less than 21 years of age:
 - (b) hold at least a valid Class 2 medical certificate issued in terms of Part 67;
 - (c) hold at least a valid restricted radiotelephony operator's certificate:
 - (d) hold a valid national pilot licence issued in terms of Part 62;
 - (e) have acquired the experience referred to in regulation 62.14.3;
 - (f) have successfully completed the training referred to in regulation 62.14.4;
 - (g) have passed the theoretical knowledge examination referred to in regulation 62.14.5; and
 - (h) have undergone the skills test referred to in regulation 62.14.6.

Experience

62.14.3 An applicant for the issuing of a Part 96 authorisation shall –

- (a) in the case of the category weight shift controlled microlight aeroplanes, conventionally controlled microlight aeroplanes and light sport aeroplanes
 - (i) have 300 hours flight time as pilot of a weight shift controlled microlight aeroplane, conventionally controlled microlight aeroplane, light sport aeroplane, gyroplane, touring motor glider or glider as the case may be, of which not less than 200 hours shall be as PIC; or
 - (ii) have 200 hours as PIC of an aeroplane with a MCM of 5 700 kg or less and at least 100 hours as PIC of an aeroplane in the same category for which Part 96 authorisation is sought:
- (b) in the case of the category paragliders, powered paragliders, hang-gliders and powered hang-gliders have a minimum of 300 flights and 200 hours of flight time and hold a valid Grade.

Training

62.14.4 An applicant for the issuing of a Part 96 authorisation shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

62.14.5 An applicant for the issuing of a Part 96 authorisation shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.

Skills test

- **62.14.6** (1) An applicant for the issuing of a Part 96 authorisation shall have demonstrated to an appropriately qualified designated examiner, the ability to perform, as PIC of an aircraft in the category for which the authorisation is sought, the procedures and maneuvers prescribed in Document SA-CATS 62 with a degree of competency appropriate to the privileges granted to the holder of a Part 96 authorisation.
- (2) The applicant shall undergo the skills test referred to in sub-regulation (1) within six months of passing the theoretical knowledge examination referred to in regulation 62.14.5 and within the 90 days immediately preceding the date of application.

Application for a Part 96 authorisation

- **62.14.7** An application for the issuing of a Part 96 authorisation shall
 - (a) be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate form as prescribed by the Director; and
 - (b) be accompanied by -
 - (i) the original or certified true copy of a valid Class 2 or Class 1 medical certificate issued in terms of Part 67;
 - (ii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 62.14.5;

- (iii) original or certified proof that the applicant has the practical experience referred to in regulation 62.14.3;
- (iv) the skills test report as prescribed in Document SA-CATS 62; and
- (vi) the appropriate fee as prescribed in Part 187.

Issuing of Part 96 authorisation

- **62.14.8** (1) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a Part 96 authorisation to the applicant if he or she complies with the requirements referred to in regulation 62.14.2.
- (2) The Part 96 authorisation shall be issued in the appropriate format as prescribed by the Director.

Period of validity

- **62.14.9** A Part 96 authorisation shall be valid for a 24 month period, provided that the privileges of the authorisation may not be exercised by the holder thereof unless he or she
 - (a) holds a valid Class 2 or Class 1 medical certificate issued in terms of Part 67;
 - (b) holds an appropriate valid category, class or type rating;
 - (c) complies with the provision of regulation 62.14.11; and
 - (d) is the holder of, or operates under a valid AOC and its MOP as approved by the Director.

Privileges of a Part 96 authorisation

- **62.14.10** (1) The holder of a Part 96 authorisation shall be entitled to
 - (a) exercise all the privileges of his or her pilot licence; and
 - (b) act as PIC for remuneration in Part 96 operations in any production-built aircraft, including a conventionally controlled microlight aircraft, a weight-shift controlled microlight aircraft, or light sport aeroplane or any gyroplane with a maximum all-up mass of 2 000 kg, or touring motor glider with a maximum all-up mass of 950kg for which he or she holds a valid category rating, class rating, or type rating.
- (2) The holder of the licence shall be entitled to exercise the privileges of the authorisation for any of the special purposes for which he or she holds the appropriate valid rating.

Maintenance of competency

62.14.11 The holder of a Part 96 authorisation shall not act as PIC in commercial air transport operations unless he or she complies with the currency requirements prescribed for his or her pilot licence and the category rating, class rating, or type rating of which he or she is the holder.

SUBPART 15: REQUIREMENTS FOR THE DESIGNATION OF EXAMINERS (DE)

Categories of DFEs

- **62.15.1** (1) Designation of examiners may be in one or more of the following categories
 - (a) Conventionally controlled microlight aeroplane examiner;
 - (b) Weight-shift controlled microlight aeroplane examiner;
 - (c) Gyroplane examiner;
 - (d) Light sport aeroplane examiner;
 - (e) Touring motor glider examiner; and
 - (f) Hang-glider, paraglider, powered paraglider, powered hang-glider, powered paratrike or powered parachute.
- (2) Examiners may be designated in more than one of the aircraft categories, referred to in subregulation (1), provided that they meet the qualification and experience requirements set out in this Subpart for each of the aircraft categories for which designation is sought.
- (3) (a) To provide for exceptional circumstances, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may on written application, approve a national of a Contracting State to act as an official flight examiner for a period not exceeding 12 months, for the purpose of renewals, class and initial type ratings, where no suitably qualified South African designated examiner is available.
- (b) The official flight examiner referred to in sub-regulation (3)(a) shall comply with the validation requirements of regulation 61.01.14.
- (4) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue the designation referred to in sub-regulation (3) in writing, subject to the payment of the applicable fee as prescribed in Part 187.
- (5) In order to be considered for the designation, an applicant shall meet at least the following minimum experience and qualification levels:
 - (a) Hold the equivalent examiner designation, or qualifications as those prescribed in regulation 62.15.2 issued by the appropriate authority of a Contracting State acceptable to the Director; or
 - (b) Hold at least a valid national pilot instructor rating Grade A or equivalent in the applicable category or class; and
 - (c) Have accumulated not less than 1 500 flying hours, of which at least:
 - (i) 500 shall be instructional hours; and
 - (ii) 50 hours on type in the category and class for which designation is sought.

Requirements

- **62.15.2** (1) An applicant for designated examiner shall
 - (a) be at least 21 years of age:
 - (b) be currently active in the field of aviation for which the designation is sought; and
 - (c) hold at least a valid national instructors rating Grade A in the category and class for which designated examiner status is sought for a minimum of 5 years; or

- (d) hold a CPL issued in terms of Part 61 with at least an Instructor Grade II rating; and
- (e) have accumulated in aeroplanes not less than 1 500 flying hours, of which at least 500 instructional hours shall be in the category and class for which designation is sought.

Application

- **62.15.3** (1) An application for designation as a designated examiner shall be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the prescribed form and be accompanied by
 - (a) the original or certified copy of the previous 12 months pages of the applicant's flying logbook indicating flying experience;
 - (b) proof of holding the required valid licence and rating;
 - (c) a complete summary of all flying experience and ratings;
 - (d) a letter to motivate the reasons why the applicant believes he or she should be considered for designation; and
 - (e) the applicable fee as prescribed in Part 187.

Issuing of designation

- **62.15.4** (1) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may designate a person as a designated examiner if the applicant
 - (a) meets the requirements prescribed in this Subpart;
 - (b) has a good record as a pilot and as flight instructor as far as safety and adherence to these regulations are concerned; and
 - (c) signs an undertaking to abide by the code of conduct for designated examiners as prescribed in Document SA-CATS 62.
- (2) The designation as examiner shall be issued by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the prescribed form, indicating the period for which the designation is valid, its category, and any endorsements, restrictions or limitations that may apply.

Period of validity

62.15.5 Designation as examiner is issued for a maximum period of 24 months from the date of appointment.

Re-designation and reissue

62.15.6 An application for re-designation or re-issue shall be made every 24 months on the prescribed form, to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, not less than 30 days prior to the beginning of the month in which the designation expires, and must be accompanied by the fee prescribed in Part 187.

Designation, oversight, suspension and withdrawal

- **62.15.7** (1) A designated examiner is designated at the discretion of the Director or the organisation designated for the purpose as the case may be, to conduct tests, evaluations, or checks to determine standards and to supply such reports to or on behalf of the Director or the organisation designated for the purpose as the case may be.
- (2) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall exercise oversight in respect of designated examiners for the purposes of maintenance of flight and safety standards.
- (3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may suspend or withdraw at any time a designation of a designated examiner where there is reasonable grounds to suspect misconduct, which could lead to the compromising of flight safety.
- (4) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall provide, in writing, reasons for the suspension or withdrawal of a designation referred to in sub-regulation (3).

Privileges and limitations

- **62.15.8** (1) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall determine the privileges and limitations of a designated examiner dependent upon the applicant's qualifications, recent and total flight experience and shall indicate these privileges and limitations on the certificate issued.
- (2) The designated examiner is the de facto representative of the Director or the organisation designated for the purpose as the case may be, and shall uphold at all times all laws and regulations related to aviation, and shall at all times maintain aviation safety standards and any requirements as agreed upon by the examiner and the Director or the organisation designated for the purpose as the case may be.

SUBPART 16: REQUIREMENTS FOR THE ISSUE OF A CATEGORY OR TYPE RATING BY NAME FOR LIGHT SPORT AEROPLANES.

General

- **62.16.1** An applicant for the issuing of a type rating by name for light sport aeroplanes shall
 - (a) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
 - (b) have acquired the experience referred to in regulation 62.16.2;
 - (c) have successfully completed the training referred to in regulation 62.16.3;
 - (d) have passed the theoretical knowledge examination referred to in regulation 62.16.4; and
 - (e) have successfully passed the skills test referred to in regulation 62.16.5.

Experience

- **62.16.2** (1) An applicant for the issuing of a type rating by name for light sport aeroplanes shall have completed not less than 35 hours flight time as a pilot of a light sport aeroplane, of which at least 15 hours shall be solo flight time, and which shall include
 - (a) one dual cross-country flight of at least three legs and of a duration of not less than 90 minutes flown at normal cruising speed; and
 - (b) one solo cross-country flight of at least three legs and of a duration of not less than 90 minutes flown at normal cruising speed;
 - (c) a minimum of one dual flight under instruction into and out of a controlled airport, this flight may be included in paragraph (a).

Training

62.16.3 An applicant for the issuing of a type rating by name for light sport aeroplanes shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

- **62.16.4** (1) An applicant for the issuing of a type rating by name for light sport aeroplanes shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.
- (2) Notwithstanding the provisions of sub-regulation (1), in the case of an applicant who is the holder of a pilot licence, issued in terms of Part 61, the applicant may be given credit for any theory at the discretion of the testing instructor or the body designated for the purpose.

Skills test

- **62.16.5** (1) An applicant for the issuing of an initial type rating by name for light sport aeroplanes shall have demonstrated to the holder of a Grade B or Grade A light sport aeroplane flight instructor rating, or a flight instructor appropriately rated in terms of Part 61, the ability to perform, as PIC of a light sport aeroplane, the procedures and manoeuvres as prescribed in Document SA-CATS 62, with a degree of competency appropriate to the privileges granted to the holder of a national pilot licence.
- (2) The applicant shall undergo the skills test, referred to in sub-regulation (1), within the 12 months of passing the theoretical knowledge examination referred to in regulation 62.16.4 and within the 60 days immediately preceding the date of application.
- (3) The skills test referred to in sub-regulation (1) shall consist of
 - (a) a general skills test of not less than 60 minutes; and
 - (b) a navigation skills test of at least three legs and a duration of not less than 90 minutes flown at normal cruising speed and which includes a full-stop landing at a controlled airport other than the point of departure.

Crediting of flight time

- **62.16.6** The holder of a licence issued in terms of Part 61 or in terms of this part as the case may be, endorsed with
 - (a) the category weight-shift controlled microlight aeroplane or gyroplane, may
 - (i) be entitled to be credited with not more than 15 hours flight time acquired in a weight-shift microlight aeroplane or gyroplane, as the case may be, towards the total flight time experience prescribed for the endorsement of a national pilot licence endorsed for the category light sport aeroplane; and
 - (ii) have acquired knowledge in the subjects principles of flight and engines and airframes towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category light sport aeroplane;
 - (b) the category conventionally controlled microlight aeroplane, may
 - (i) be entitled to be credited with not more than 20 hours flight time acquired in a conventionally controlled microlight aeroplane towards the total flight time experience prescribed for the endorsement of a national pilot licence for the category light sport aeroplane; and
 - (ii) have acquired knowledge in the subjects meteorology, engines and air frames and navigation principles of flight towards the theoretical knowledge requirements prescribed for the endorsement of a national pilot licence endorsed for the category light sport aeroplane;
 - (c) the category touring motor gliders, may
 - (i) be entitled to be credited with not more than 30 hours flight time acquired in a touring motor gliders, towards the total flight time experience prescribed for the issuing of a national pilot licence endorsed for the category light sport aeroplane;
 - (ii) accredited acquired knowledge in all subjects towards the theoretical knowledge requirements prescribed for the issuing of a national pilot licence endorsed for the category light sport aeroplane.
 - (d) a pilot licence issued in terms of Part 61, the hour requirements and the cross-country requirements, referred to in 62.16.2, may be relaxed at the discretion of the flight instructor who conducts the skills test, referred to in regulation 62.16.5.

Additional type rating by name for light sport aeroplanes

62.16.7 An applicant for the issue of an additional type rating by name for light sport aeroplanes shall –

- (a) undergo a skills test with a Grade C-, B- or A- instructor with the appropriate type rating as prescribed in Document SA-CATS 62;
- (b) with the examiner at the dual controls perform at least 5 take-offs and 5 landings and any other exercise considered necessary; and
- (c) pass the technical exams as prescribed in Document SA-CATS 62.

Application

- **62.16.8** An application for the issuing of type rating by name for light sport aeroplanes shall
 - (a) be made to the Director or to the organisation, designated for the purpose in terms of Part 149, as the case may be, on the appropriate form as prescribed by the Director; and
 - (b) be accompanied by -
 - (i) a valid application for the issue of such licence;
 - (ii) certified proof that the requirements prescribed in regulation 62.16.1 or 62.16.7, if applicable, have been complied with;
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that the fees set by the latter may not exceed those prescribed in Part 187.

Issuing

- **62.16.9** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue a type rating by name for light sport aeroplanes if the applicant complies with the requirements referred to in regulation 62.16.8.
- (2) A type rating by name for light sport aeroplanes shall be issued in the prescribed format.

Period of validity

62.16.10 A type rating by name for light sport aeroplanes shall be valid for as long as the national pilot licence itself remains valid, on the condition that the privileges of the type rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 62.16.12.

Privileges and limitations

- **62.16.11** (1) The holder of a type rating by name for light sport aeroplanes shall be entitled to act as PIC of the light sport aeroplane for which he or she is rated by name, provided it is not operated for the provision of an air service
 - (a) within Class F and Class G airspace;

- (b) within controlled airspace, unless -
 - (i) prior permission has been obtained from the responsible ATSU to enter such airspace;
 - (ii) such two-way radio communication as the said unit may require, is established;
 - (iii) continuous radio watch is maintained; and
 - (iv) while within an aerodrome traffic zone, the appropriate radio position reporting procedure is complied with.
- (2) Notwithstanding the provisions of sub-regulation (1), the holder of a type rating by name for light sport aeroplanes may exercise the privileges of his or her rating for remuneration in an aircraft operated in terms of Part 96, provided he or she is the holder of a valid Part 96 authorisation issued in terms of Subpart 14 of this Part.

Maintenance of competency

- **62.16.12** The holder of a type rating by name for light sport aeroplanes shall not act as PIC of a light sport aeroplane unless he or she
 - (a) has acted as PIC of a light sport aeroplane for a minimum of 5 hours in the 12 months immediately preceding the intended flight and such minimum flight time may include flights undertaken by the pilot whilst receiving training appropriate to the type of light sport aeroplane; or
 - (b) has passed a skills test with an appropriately-rated flight instructor within the three months immediately preceding the intended flight; and
 - (c) if transporting a passenger, has within the 90 days immediately preceding the flight on which such passenger is to be transported, as PIC executed not less than three take-offs and three landings in a light sport aeroplane.

SUBPART 17: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR TYPE RATING BY NAME FOR TOURING MOTOR GLIDERS

General

- **62.17.1** An applicant for the issuing of a type rating by name for touring motor glider shall
 - (a) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical):
 - (b) have acquired the experience referred to in regulation 62.17.2;
 - (c) have successfully completed the training referred to in regulation 62.17.3;
 - (d) have passed the theoretical knowledge examination referred to in regulation 62.17.4;
 - (e) have successfully passed the skills test referred to in regulation 62.17.5; and
 - (f) hold at least a valid class 4 medical certificate.

Experience

- **62.17.2** (1) An applicant for the issuing of an initial type rating by name for touring motor gliders shall have completed not less than 35 hours flight time as a pilot of a touring motor glider which shall include a minimum total of 40 flights, including 20 solo flights: Provided that the solo flights include a minimum of 15 hours of solo flight, which includes
 - (a) one flight of minimum 30 minutes flight time continuous engine off, with:
 - (i) a shutdown not exceeding 3000 ft AGL of the intended landing site; and
 - (ii) a soaring circuit and engine off landing;
 - (b) two dual cross country flights with a duration of not less than 90 minutes flown at normal cruising speed, of which at least one will be a navigation test;
 - (c) one solo cross-country flight, duration of not less than 90 minutes flown at normal cruising speed including a full stop landing at a point other than the point of departure and destination (with no engine shutdown or soaring requirement); and
 - (d) at least one dual and one solo flight into controlled airspace, including a full stop landing and takeoff at a controlled airfield.
- (2) An applicant for the issuing of an additional type rating by name, in the category touring motor glider shall have completed not less than a minimum total of two flights of which one shall be a solo flight of a minimum of one hour flying time including at least three take-offs and landings during this time.
- (3) Notwithstanding the provisions of sub-regulations (1) and (2), in the case of an applicant with extensive experience as the holder of a national pilot licence with the category endorsements for either conventionally controlled microlight aeroplanes or light sport aeroplanes, or the holder of a pilot licence issued in terms of Part 61, the requirements may be relaxed, for a touring motor glider first type rating, to the minimum requirements according to sub-regulation (2) at the discretion of the flight instructor who conducts the skills test.
- (4) Notwithstanding the provisions of sub-regulation (1), in the case of an applicant who is the holder of a national pilot licence with a category rating for gyroplanes or weight shift controlled microlight aeroplane, the cross-country requirements, referred to in sub-regulation (1) (b) and (c) may be relaxed at the discretion of the flight instructor who conducts the skills test.

Training

62.17.3 An applicant for the issuing of an open class rating or a type rating by name in the category touring motor glider shall have successfully completed the appropriate training as prescribed in Document SA-CATS 62.

Theoretical knowledge examination

- **62.17.4** (1) An applicant for the issuing of an open class rating or a type rating by name for touring motor gliders shall have passed the appropriate written examination as prescribed in Document SA-CATS 62.
- (2) Notwithstanding the provisions of sub-regulation (1), in the case of an applicant with extensive experience, who is the holder of a pilot licence issued in terms of Part 61, or is the holder of a national pilot licence endorsed with the categories conventionally controlled microlight aeroplane or light sport aeroplane, the applicant may be given credit for any theoretical examination at the discretion of the testing instructor.
- (3) Notwithstanding the provisions of sub-regulation (2), in the case of an applicant who is the holder of a national pilot licence endorsed for the category weight shift controlled microlight aeroplane or gyroplane the applicant may be given credit for any theoretical examination at the discretion of the testing instructor; provided that the gliding theoretical knowledge examinations must be written.

Skills test

- **62.17.5** (1) An applicant for the issuing of an initial type rating by name for touring motor gliders shall have demonstrated to the holder of a Grade B or Grade A touring motor glider flight instructor rating, the ability to perform, as PIC of a touring motor glider, the procedures and manoeuvres as prescribed in Document SA-CATS 62, with a degree of competency appropriate to the privileges granted to the holder of a national pilot licence.
- (2) The applicant shall undergo the skills test, referred to in sub-regulation (1), within 12 months of passing the theoretical knowledge examination referred to in regulation 62.17.4 and within 60 days immediately preceding the date of application.

Crediting of flight time

- **62.17.6** The holder of a glider pilot licence, or a national pilot licence endorsed for the category weight shift controlled microlight aeroplane, conventionally controlled microlight aeroplane or gyroplane, may be entitled to be credited with
 - (a) in the case of weight shift controlled microlight aeroplanes and gyroplanes, not more than 15 hours flight time acquired towards the total flight time experience prescribed for the issuing of a national pilot licence endorsed for the category light sport aeroplane;
 - (b) in the case of conventionally controlled microlight aeroplanes, light sport aeroplanes and gliders, not more than 25 hours flight time acquired towards the total flight time experience prescribed for the issuing of a national pilot licence endorsed for the category touring motor glider.

Additional type ratings by name for touring motor gliders

62.17.7 An applicant for the issue of an additional type rating by name for touring motor gliders shall –

- (a) undergo a skills test with a Grade C, B or A instructor with the appropriate type rating as prescribed in Document SA-CATS 62;
- (b) with the examiner at the dual controls, perform at least 5 take-offs and 5 landings and any other exercise considered necessary; and
- (c) pass the technical exams as prescribed in Document SA-CATS 62.

Application

- **62.17.8** An application for the issuing of an open class rating or type rating by name for touring motor gliders shall
 - (a) be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
 - (b) be accompanied by -
 - (i) a valid application for the issue of such licence;
 - (ii) certified proof that the requirements prescribed in regulation 62.17.1 or 62.17.7, if applicable, have been complied with; and
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that the fees set by the latter may not exceed those prescribed in Part 187.

Issuing

- **62.17.9** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue an open class rating or type rating by name for touring motor gliders if the applicant complies with the requirements referred to in regulation 62.17.8.
- (2) An open class rating or type rating by name for touring motor gliders shall be issued in the format prescribed in Document SA-CATS 62.

Period of validity

62.17.10 An open class rating or type rating by name for touring motor gliders shall be valid for as long as the national pilot licence itself remains valid, with the proviso that the privileges of the open class rating or type rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 62.17.12.

Privileges and limitations

- **62.17.11** (1) The holder of an open class rating or a type rating by name for touring motor gliders shall be entitled to act as PIC of the touring motor glider for which he or she is rated by name, provided it is not operated for the provision of an air service,
 - (a) within Class F and Class G airspace;
 - (b) within controlled airspace unless
 - (i) prior permission has been obtained from the responsible ATSU to enter such airspace;
 - (ii) a two-way radio communication as the ATSU may require, is established;
 - (iii) continuous radio watch is maintained; and
 - (iv) while within an aerodrome traffic zone, the appropriate radio position reporting procedure is complied with.
- (2) Notwithstanding the provisions of sub-regulation (1)
 - (a) the holder of a type rating by name for touring motor gliders may exercise the privileges of his or her rating for remuneration in an aircraft operated in terms of Part 96, provided he or she is the holder of a valid Part 96 authorisation issued in terms of Subpart 14; and
 - (b) the holder of an open class rating for touring motor gliders shall familiarise him- or herself with any type of touring motor glider that he or she has not flown previously, before undertaking a flight in such aircraft.

Maintenance of competency

- **62.17.12** The holder of a type rating by name for touring motor gliders shall not act as PIC of a touring motor glider unless he or she
 - (a) has acted as PIC of a touring motor glider for a minimum of 5 hours flight time or 10 flights in the 12 months immediately preceding the intended flight and such minimum flight time may include check flights or flights undertaken by the pilot whilst receiving training appropriate to the type of touring motor glider; or
 - (b) has passed a skills test with an appropriately rated flight instructor within 90 days immediately preceding the intended flight; and
 - (c) if transporting a passenger, has within the 90 days immediately preceding the flight on which such passenger is to be transported, as PIC, has executed not less than three take-offs and three landings in a touring motor glider.

PART 63: FLIGHT ENGINEER LICENSING

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SUBPART 1: GENERAL

Applicability

63.01.1 This Part applies to -

- (a) the issuing of flight engineer licences and ratings for South African flight engineers, the privileges and imitations of such licences and ratings, and matters related thereto; and
- (b) the validation of foreign flight engineer licences and ratings and the privileges and limitations of such validations.

Authority to act as flight engineer

63.01.2 (1) No person shall act as a flight engineer of a South African registered aircraft unless such person holds a valid –

- (a) flight engineer licence and rating issued, renewed or reissued in terms of this Part; or
- (b) flight engineer licence and rating issued by an appropriate authority and validated in terms of this part.

- (2) The holder of a flight engineer licence shall not exercise privileges other than the privileges granted by the licence and appropriate rating held by such holder.
- (3) The holder of a flight engineer licence shall pay the annual currency fee as prescribed in Part 187 applicable to the type of licence on the anniversary date of such licence.

Validation of licence issued by appropriate authority

- **63.01.3** (1) The holder of a licence and rating issued by an appropriate authority, who desires to act as a flight engineer on a South African registered aircraft, shall apply in the prescribed appropriate form, for a validation of such licence and rating.
- (2) The application for a validation referred to in sub-regulation (1) shall be accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the licence and rating to which the validation pertains;
 - (c) a valid medical certificate; and
 - (d) in the case of a validation of a licence and rating, the privileges of which are to be exercised for commercial purposes, a temporary work permit, permanent residency permit and a letter of appointment from a South African employer who requires the services of the applicant.
- (3) A licence and rating issued by an appropriate authority may be validated by the Director
 - (a) subject to the same restrictions which apply to such licence and rating;
 - (b) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 63; and
 - (c) in the appropriate prescribed form;
- (4) The duration of a validation issued by the Director shall be
 - (a) 12 months calculated from the date of issue of such validation by the Director; or
 - (b) the period of validity of the licence and rating issued by the appropriate authority concerned, whichever period is the lesser period.
- (5) The holder of a validation may, subject to the provisions of sub-regulation (6), apply to the Director for a renewal of such validation at least 21 days immediately preceding the date of expiry of such validation.
- (6) The Director may renew a validation of a licence and rating in the circumstances and on the conditions as prescribed in Document SA-CATS 63: Provided that a validation of a licence and rating, the privileges of which are to be exercised for commercial purposes, may only be renewed once for the same period referred to in sub-regulation (4).
- (7) The holder of a validation shall comply with the provisions prescribed in this part and the requirements and conditions as prescribed in Document SA-CATS 63.
- (8) Notwithstanding the provisions of regulation 63.01.2(2), the Director may validate any flight engineer licence and rating issued by an appropriate authority, to authorise the holder thereof to

conduct training on a particular type of aircraft to which the rating pertains, if no holder of a Grade I flight instructor rating is available to conduct such training.

Competency

- **63.01.4** (1) No holder of a flight engineer licence and rating shall exercise the privileges granted by the licence and rating unless such holder maintains competency by complying with the appropriate requirements prescribed in this part.
- (2) The holder of a flight engineer licence and rating shall submit copies of all documentation relating to continued maintenance of competency to the Director within 7 days after compliance with the appropriate requirements prescribed in this Part.

Documentation

63.01.5 The Director shall ensure that a flight engineer licence and rating is issued in such a manner that the validity thereof may readily be determined by an appropriate authority.

Logbooks

- **63.01.6** (1) The holder of a flight engineer licence shall maintain a logbook and shall record therein all flight time spent as a fight engineer.
- (2) The form of and information to be contained in a logbook referred to in sub-regulation (1) and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 63.

Medical fitness

63.01.7 An applicant for or holder of a flight engineer licence shall obtain a Class 1 medical certificate issued in terms of Part 67.

Ratings for flight engineers and flight engineer instructors

- **63.01.8** The ratings for flight engineers and flight engineer instructors are
 - (a) a type rating; and
 - (b) a rating for special purposes.

Type ratings

63.01.9 Type ratings for aircraft shall comprise a rating by name for each type of aircraft, of which the design necessitates the carriage of a flight engineer, and a rating by name for each type of engine.

Ratings for special purposes

- **63.01.10** The ratings for special purposed shall comprise a
 - (a) Grade I flight engineer instructor rating; and
 - (b) Grade II flight engineer instructor rating.

Register of licences

- **63.01.11** (1) The Director shall maintain a register of all flight engineer licences and ratings issued or validated in terms of the regulations in this part.
- (2) The register shall contain the following particulars
 - (a) The full name of the holder of the licence;
 - (b) the postal address of the holder of the licence;
 - (c) the date on which the licence was issued or validated;
 - (d) particulars of the ratings held by the holder of the licence; and
 - (e) the nationality of the holder of the licence.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence or rating is issued or validated by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Language

63.01.12 The holder of a flight engineer licence issued under this part shall have sufficient ability in reading, speaking and understanding the English language to enable the holder to adequately carry out his or her responsibilities as a flight engineer.

Retesting after failure

63.01.13 An applicant for the issuing of a flight engineer licence or rating who fails a theoretical knowledge examination, required for such licence or rating, may apply for retesting after the appropriate period specified in Document SA-CATS 63.

Designation of examiner

- **63.01.14** (1) The Director may designate an examiner to
 - (a) conduct skill tests and to compete skill test reports required for the reissuing of type ratings; and
 - (b) conduct skill tests and to complete skill test reports required for the issuing and reissuing of flight engineer instructor ratings.
- (2) The privileges referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 63.
- (3) The Director shall sign and issue to each designated examiner a document which shall state the full name of such examiner and contain a statement that
 - (a) such examiner has been designated in terms of sub-regulation (1); and

- (b) such examiner is empowered to exercise the privileges referred to in subregulation (1).
- (4) The application to be considered for designation as referred to in sub-regulation (1) shall be accompanied by
 - (a) detail of the licence and ratings to which the application applies; and
 - (b) the appropriate fee as prescribed in Part 187.

Training

63.01.15 Training as required by this Part shall only be provided by the holder of an ATO approval issued in terms of Part 141.

SUBPART 2: FLIGHT ENGINEER LICENCE

Requirements for flight engineer licence

63.02.1 An applicant for the issuing of a flight engineer licence shall –

- (a) be not less than 18 years of age;
- (b) hold a valid Class 1 medical certificate issued in terms of Part 67;
- (c) have acquired the experience referred to in regulation 63.02.2;
- (d) have successfully completed the training referred to in regulation 63.02.3;
- (e) have passed the theoretical knowledge examination referred to in regulation 63.02.4;
- (f) have undergone the skills test referred to in regulation 63.02.5; and
- (g) have acquired or hold -
 - not less than three years; practical aeronautical engineering experience of which not less than one year shall have been obtained on a multi-engine aircraft with a MCM exceeding 11 400 kilograms;
 - (ii) an approved B.Sc Aeronautical Engineering degree and not less than six months of practical experience in maintaining multi-engine aircraft with a MCM exceeding 11 400 kilograms;
 - (iii) a valid CPL with a valid instrument rating; or
 - (iv) a valid ATPL.

Experience

63.02.2 An applicant for the issuing of a flight engineer licence shall have completed, under the supervision of the holder of a flight engineer instructor rating, not less than 100 hours of flight time performing the duties of a flight engineer, of which 50 hours may be acquired in a simulator.

Training

63.02.3 An applicant for the issuing of a flight engineer licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 63.

Theoretical knowledge examination

63.02.4 An applicant for the issuing of a flight engineer licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 63.

Skills test

- **63.02.5** (1) An applicant for the issuing of a flight engineer licence shall have demonstrated to the holder of a Grade I flight engineer instructor rating the ability to perform as flight engineer of an aircraft, the duties and procedures as prescribed in Document SA-CATS 63, with a degree of competency appropriate to the privileges granted to the holder of a flight engineer licence.
- (2) The applicant shall undergo the skills test referred to in sub-regulation (1) within 24 months of passing the theoretical knowledge examination referred to in regulation 63.02.4 and within the 90 days immediately preceding the date of application.

Application for flight engineer licence

- **63.02.6** An application for the issuing of a flight engineer licence shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) original or certified proof of
 - (aa) the identity of the applicant; and
 - (bb) the age of the applicant;
 - (ii) a valid Class 1 medical certificate issued in terms of Part 67;
 - (iii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 63.02.4;
 - (iv) the skill test report as prescribed in Document SA-CATS 63;
 - (v) the valid CPL, ATPL, proof of the practical aeronautical engineering experience or a B.Sc Aeronautical Engineering degree, as the case may be, held or obtained by the applicant;
 - (vi) the appropriate fee as prescribed in Part 187; and
 - (vii) two recent passport size photographs of the applicant.

Issuing of flight engineer licence

- **63.02.7** (1) The Director shall issue a flight engineer licence if the applicant complies with the requirements referred to in regulation 63.02.1.
- (2) A flight engineer licence shall be issued on the appropriate prescribed form.

(3) Upon the issuing of a flight engineer licence the holder thereof shall forthwith affix his or her signature in ink in the space on the licence provided for such purpose.

Period of validity

- **63.02.8** A flight engineer licence shall be valid for an indefinite period: Provided that the privileges of the licence shall not be exercised by the holder thereof unless
 - (a) he or she is the holder of a valid Class 1 medical certificate issued in terms of Part 67; and
 - (b) he or she holds a valid type rating.

Privileges

- **63.02.9** The holder of a valid flight engineer licence shall be entitled to act as a flight engineer
 - (a) in any aircraft in respect of which he or she is the holder of a type rating;
 - (b) in an aircraft of a type other than that in respect of which he or she is the holder of a type rating, if he or she so acts under the direct supervision of the holder of a flight engineer licence with a type rating appropriate to that aircraft, or if he or she acts in an aircraft on which a flight engineer is not required, under the direct supervision of the PIC of that aircraft.

SUBPART 3: TYPE RATING

Requirements for type rating

- **63.03.1** (1) An applicant for the issuing of a type rating shall
 - (a) have successfully completed the training referred to in regulation 63.03.2;
 - (b) have passed the theoretical knowledge examination referred to in regulation 63.03.3; and
 - (c) have undergone the skill test referred to in regulation 63.03.4; and
 - (d) have complied with the requirements for a flight engineer licence referred to in regulation 63.02.1.
- (2) An applicant for the issuing of any additional type rating shall
 - (a) hold a valid flight engineer licence;
 - (b) comply with the requirements prescribed in regulation 63.03.3;
 - (c) submit to the Director his or her logbook or a certificate signed by the holder of a Grade I flight engineer instructor rating, showing that he or she has completed, during the 12 months immediately preceding the date of application, not less than 50 hours of flight time in the performance of the duties of a flight engineer on board the type of aircraft to which the application relates or one with similar characteristics; and
 - (d) have undergone the skill test referred to in regulation 63.03.4, in the type of aircraft to which the application relates.

Training

63.03.2 An applicant for the issuing of a type rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 63.

Theoretical knowledge examination

63.03.3 An applicant for the issuing of a type rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 63.

Skill test

63.03.4 An applicant for the issuing of a type rating shall have demonstrated to the holder of a Grade I flight engineer instructor rating the ability to perform the procedures and manoeuvres as prescribed in Document SA-CATS 63, with a degree of competency appropriate to the privileges granted to the holder of such type rating.

Temporary certificate of competency

63.03.5 The holder of a Grade I flight engineer instructor rating may issue the applicant for the issuing of a type rating, with a temporary certificate of competency, which shall permit the applicant to exercise the privileges of such type rating, for a period of 30 days calculated from the date of issue of such temporary certificate.

Application for type rating

- **63.03.6** An application for the issuing of a type rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by
 - (i) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 63.03.3;
 - (ii) the skills test report as prescribed in Document SA-CATS 63; and
 - (iii) the appropriate fee as prescribed in Part 187.

Issuing of type rating

- **63.03.7** (1) The Director shall issue a type rating if the applicant complies with the requirements referred to in regulation 63.03.1.
- (2) A type rating shall be issued in the appropriate prescribed form .

Period of validity

63.03.8 A type rating shall be valid for a period of 12 months calculated from the date of issue or reissue of the rating or from the date of expiry of the rating if such rating is renewed in accordance with the provisions of regulation 63.03.10.

Privileges

63.03.9 The holder of a valid type rating shall be entitled to act as a flight engineer in the type of aircraft for which the holder is rated.

Renewal

- **63.03.10** (1) To renew a type rating, the holder of the rating shall
 - (a) within the 12 months immediately preceding the date of expiry of such rating, have completed not less than 50 hours of flight time as flight engineer of an aircraft for which the holder is type rated; and
 - (b) within the 90 days immediately preceding the date of expiry of such rating, have undergone a proficiency check as prescribed in Document SA-CATS 63, conducted by the holder of a Grade I flight engineer instructor rating.
- (2) The holder of a Grade I flight engineer instructor rating shall upon compliance with the requirements prescribed in sub-regulation (1)(a) or (b) by the holder of the rating
 - (a) provide the Director with the appropriate certificate of competency as prescribed in Document SA-CATS 63;
 - (b) sign the appropriate page of the licence of such holder; and
 - (c) endorse the logbook of such holder.
- (3) If the result of the proficiency check contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 63.03.9, the holder of the Grade I flight engineer instructor rating shall
 - (a) report such result to the Director; and
 - (b) not sign the appropriate page of the licence of the holder of the rating.

Reissue

- **63.03.11** (1) To reissue a type rating which has expired due to the lapse of the period referred to in regulation 63.03.8, the holder of such expired rating shall
 - (a) within the 12 months immediately preceding the date of application, have completed not less than eight hours of flight time as flight engineer under the supervision of the holder of a flight engineer rating; and
 - (b) demonstrate to a designated examiner the procedures and manoeuvres referred to in regulation 63.03.4.
- (2) The designated examiner shall, upon compliance with the requirements prescribed in sub-regulation (1)(a) and (b) by the holder of the expired rating
 - (a) provide the Director with the skill test report as prescribed in Document SA-CATS 63;

- (b) sign the appropriate page of the licence of such holder; and
- (c) endorse the logbook of such holder.
- (3) If the result of the skill test contemplated in sub-regulation (1) reveals that the holder of the expired rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 63.03.9, the designated examiner shall
 - (a) report such result to the Director; and
 - (b) not sign the appropriate page of the licence of the holder of the expired rating.

SUBPART 4: GRADE I FLIGHT ENGINEER INSTRUCTOR RATING

Requirements for Grade I flight engineer instructor rating

- **63.04.1** An applicant for the issuing of a Grade I flight engineer instructor rating shall
 - (a) hold a valid flight engineer licence, type rating and Grade II flight engineer instructor rating;
 - (b) have acquired the experience referred to in regulation 63.04.2;
 - (c) have successfully completed the training referred to in regulation 63.04.3;
 - (d) have passed the theoretical knowledge examination referred to in regulation 63.04.4; and
 - (e) have undergone the skill test referred to in regulation 63.04.5.

Experience

63.04.2 An applicant for the issuing of a Grade I flight engineer instructor rating shall have at least three years experience as a Grade II flight engineer instructor, during which he or she shall have given not less than 500 hours of flight engineer instruction.

Training

63.04.3 An applicant for the issuing of a Grade I flight engineer instructor rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 63.

Theoretical knowledge examination

63.04.4 An applicant for the issuing of a Grade I flight engineer instructor rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 63. **Skills test**

- **63.04.5** (1) An applicant for the issuing of a Grade I flight engineer instructor rating shall demonstrate to a designated examiner the ability to perform the procedures as prescribed in Document SA-CATS 63, with a degree of competency appropriate to the privileges granted to the holder of a Grade I flight engineer instructor rating.
- (2) The applicant shall undergo the skill test referred to in sub-regulation (1) within six months of passing the theoretical knowledge examination referred to in regulation 63.04.4 and within the 90 days immediately preceding the date of application.

Application for Grade I flight engineer instructor rating

- **63.04.6** An application for a Grade I flight engineer instructor rating shall be
 - (a) made to the Director in the appropriate prescribed form;
 - (b) accompanied by -
 - (i) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 63.04.4;
 - (ii) the skill test report as prescribed in Document SA-CATS 63;
 - (iii) the flight engineer licence, type rating and Grade II flight engineer instructor rating of the applicant; and
 - (iv) the appropriate fee as prescribed in Part 187.

Issuing of Grade I flight engineer instructor rating

- **63.04.7** (1) The Director shall issue a Grade I flight engineer instructor rating if the applicant complies with the requirements referred to in regulation 63.04.1.
- (2) A Grade I flight engineer instructor rating shall be issued in the appropriate form as prescribed in Document SA-CATS 63.

Period of validity

63.04.8 A Grade I flight engineer instructor rating shall be valid for a period of three years calculated from the date of issue or reissue of the rating or from the date of expiry of the rating if such rating is renewed in accordance with the provisions of regulation 63.04.10.

Privileges

- **63.04.9** (1) The holder of a valid Grade I flight engineer instructor rating shall be entitled to exercise the privileges of such rating in the type of aircraft for which the holder is rated.
- (2) The holder of a valid Grade I flight engineer instructor rating
 - (a) may give fight engineer instruction for the issuing of a flight engineer licence or type rating; and
 - (b) may assess any applicant for the issuing of a fight engineer licence or type rating and compete the appropriate skill test report and certificate of competency.

Renewal

63.04.10 (1) To renew a Grade I flight engineer instructor rating, the holder of the rating shall within the 90 days immediately preceding the date of expiry of such rating, comply with any two of the following requirements:

- (a) Give not less than 50 hours flight engineer instruction within the three years preceding the date of expiry, of which not less than 30 hours shall be given within the 12 months immediately preceding the date of expiry of such rating;
- (b) attend a flight engineer instructor refresher seminar as prescribed in Document SA-CATS 63;
- (c) undergo the skill test referred to in regulation 63.04.5.
- (2) The designated examiner shall, upon compliance with the requirements referred to in sub-regulation (1)(a) and (b) by the holder of the rating
 - (a) provide the Director with the skill test report as prescribed in Document SA-CATS 63;
 - (b) sign the appropriate page of the licence of such holder; and
 - (c) endorse the logbook of such holder.
- (3) If the result of the skill test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 63.04.9, the designated examiner shall
 - (a) report such result to the Director; and
 - (b) not sign the appropriate page of the licence of the holder of the rating.

Reissue

- **63.04.11** (1) The holder of a Grade I flight engineer instructor rating which has expired due to the lapse of the period referred to in regulation 63.04.8, may, before a further period of 60 months, calculated from the date of expiry of the rating, has lapsed, apply for the reissuing of the expired rating.
- (2) The Director shall reissue the expired rating if the applicant has
 - (a) complied with the requirements for the reissue of an expired Grade II flight engineer instructor rating prescribed in regulation 63.05.11(1);
 - (b) given not less than 50 hours flight engineer instruction as the holder of a Grade II flight engineer instructor rating reissued in terms of regulation 63.05.11; and
 - (c) undergone the skill test referred to in regulation 63.04.5.
- (3) An application for the reissuing of the expired rating shall be accompanied by
 - (a) the Grade I flight engineer instructor rating reissued in terms of regulation 63.05.11;
 - (b) a copy of the relevant page of the logbook of the applicant;
 - (c) the skill test report as prescribed in Document SA-CATS 63; and
 - (d) the appropriate fee as prescribed in Part 187.
- (4) If a period of 60 months has lapsed after the date of expiry of the rating, the holder of the expired rating may apply to the Director for the reissuing of the rating and the Director shall reissue the rating if the applicant complies with the requirements for a Grade I flight engineer instructor rating referred to in regulation 63.04.1.
- (5) The provisions of regulation 63.04.6 shall apply with the necessary changes to an application referred to in this regulation.

SUBPART 5: GRADE II FLIGHT ENGINEER INSTRUCTOR RATING

Requirements for Grade II flight engineer instructor rating

- **63.05.1** An applicant for the issuing of a Grade II flight engineer instructor rating shall
 - (a) hold a valid flight engineer licence and type rating;
 - (b) have acquired the experience referred to in regulation 63.05.2;
 - (c) have successfully completed the training referred to in regulation 63.05.3;
 - (d) have passed the theoretical knowledge examination referred to in regulation 63.05.4; and
 - (e) have undergone the skill test referred to in regulation 63.05.5.

Experience

63.05.2 An applicant for the issuing of a Grade II fight engineer instructor rating shall have completed a training course during which not less than 25 hours of flight engineer instruction shall have been given under the supervision of the holder of a Grade I flight engineer instructor rating.

Training

63.05.3 An applicant for the issuing of a Grade II flight engineer instructor rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 63.

Theoretical knowledge examination

63.05.4 An applicant for the issuing of a Grade II flight engineer instructor rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 63.

Skill test

- **63.05.5** (1) An applicant for the issuing of a Grade II flight engineer instructor rating shall demonstrate to a designated examiner the ability to perform the procedures as prescribed in Document SA-CATS 63, with a degree of competency appropriate to the privileges granted to the holder of a Grade II flight engineer instructor rating.
- (2) The applicant shall undergo the skill test referred to in sub-regulation (1) within six months of passing the theoretical knowledge examination referred to in regulation 63.05.3 and within the 90 days immediately preceding the date of application.

Application for Grade II flight engineer instructor rating

- **63.05.6** An application for a Grade II fight engineer instructor rating shall be
 - (a) made to the Director in the appropriate prescribed form;
 - (b) accompanied by -

- (i) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 63.05.4;
- (ii) the skill test report as prescribed in Document SA-CATS 63;
- (iii) the flight engineer licence and type rating of the applicant; and
- (iv) the appropriate fee as prescribed in Part 187.

Issuing of Grade II flight engineer instructor rating

- **63.05.7** (1) The Director shall issue a Grade II flight engineer instructor rating if the applicant complies with the requirements referred to in regulation 63.05.1.
- (2) A Grade II flight engineer instructor rating shall be issued in the appropriate form as prescribed in Document SA-CATS 63.

Period of validity

63.05.8 A Grade II flight engineer instructor rating shall be valid for a period of three years calculated from the date of issue or reissue of the rating or from the date of expiry of the rating if such rating is renewed in accordance with the provisions of regulation 63.05.10.

Privileges

- **63.05.9** (1) The holder of a valid Grade II flight engineer instructor rating shall be entitled to exercise the privileges of such rating in the type or aircraft for which the holder is rated.
- (2) The holder of a valid Grade II flight engineer instructor rating may give flight engineer instruction for the issuing of a flight engineer licence or type rating.

Renewal

- **63.05.10** (1) To renew a Grade II flight engineer instructor rating, the holder of the rating shall within the 90 days immediately preceding the date of expiry of such rating, comply with any two of the following requirements:
 - (a) Give not less than 50 hours flight engineer instruction within the three years preceding the date of expiry, of which not less than 30 hours shall be given within the 12 months immediately preceding the date of expiry of such rating;
 - (b) attend a flight engineer instructor refresher seminar as prescribed in Document SA-CATS 63:
 - (c) undergo the skill test referred to in regulation 63.05.5.
- (2) The designated examiner shall, upon compliance with the requirements referred to in sub-regulation (1)(a) and (b) by the holder of the rating
 - (a) provide the Director with the skill test report as prescribed in Document SA-CATS 63;
 - (b) sign the appropriate page of the licence of such holder; and
 - (c) endorse the logbook of such holder.

- (3) If the result of the skill test contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 63.05.9, the designated examiner shall
 - (a) report such result to the Director; and
 - (b) not sign the appropriate page of the licence of the holder of the rating.

Reissue

- **63.05.11** (1) If a Grade II flight engineer instructor rating expires due to the lapse of the period referred to in regulation 63.05.8, the holder thereof may apply for the reissuing of the expired rating before a further period of 60 months, has lapsed, if such holder has, within the 90 days preceding the date of application
 - (a) attended a flight engineer instructor refresher seminar as prescribed in Document SA-CATS 63; and
 - (b) undergone the skill test referred to in regulation 63.05.5.
- (2) An application for the reissuing of the expired rating shall be accompanied by
 - (a) original or certified proof that the applicant has attended the flight engineer instructor refresher seminar referred to in sub-regulation (1)(a);
 - (b) the skill test report referred to in sub-regulation (1)(b); and
 - (c) the appropriate fee as prescribed in Part 187.
- (3) A Grade II flight engineer instructor rating which has expired due to the lapse of the period referred to in regulation 63.05.8, and after a further period of 60 months has lapsed, may be reissued by the Director if the holder of such expired flight engineer instructor rating complies with the requirements for the initial issue of a Grade II flight engineer instructor rating.
- (4) The provisions of regulation 63.05.6 shall apply with the necessary changes to an application referred to in this regulation.

PART 64: CABIN CREW LICENSING

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SUBPART 1: GENERAL

Applicability

64.01.1 This Part applies to the application for and issuing of licences for cabin crew members, the privileges and limitations of such licences and matters related thereto.

Authority to act as cabin crew member

- **64.01.2** (1) No person shall act as a cabin crew member of a South African registered aircraft unless such person is the holder of a valid cabin crew member licence issued in terms of this part.
- (2) No cabin crew member shall exercise privileges other than the privileges granted by the licence held by such cabin crew member.
- (3) The holder of a cabin crew member licence shall pay the annual currency fees as prescribed in Part 187 applicable to the type of licence on the anniversary date of such licence.

Competency

- **64.01.3** (1) No cabin crew member shall exercise the privileges granted by a cabin crew member licence unless such cabin crew member maintains competency by complying with the requirements prescribed in this part.
- (2) The holder of a cabin crew member licence shall submit copies of all documentation reflecting continued maintenance of competency to the Director within 7 days after compliance with the appropriate requirements prescribed in this Part.

Documentation

64.01.4 The Director shall ensure that a cabin crew member licence is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Logbooks

- **64.01.5** (1) A cabin crew member shall maintain a logbook and shall record therein all flight time spent as a cabin crew member.
- (2) The form of and information to be contained in a logbook referred to in sub-regulation (1) and the manner in which such logbook has to be maintained, are prescribed in Document SA-CATS 64.

Medical fitness

64.01.6 An applicant for or the holder of a cabin crew member licence shall obtain a Class 2 medical certificate issued in terms of Part 67.

Register of licences

- **64.01.7** (1) The Director shall maintain a register of all cabin crew member licences issued in terms of this Part.
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the licence;
 - (b) the postal address of the holder of the licence:
 - (c) the date on which the licence was issued;
 - (d) the nationality of the holder of the licence.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Language

- **64.01.8** (1) Cabin crew members shall have sufficient ability in reading, speaking and understanding the English language to enable them to adequately carry out their responsibilities as cabin crew members.
- (2) A person shall not be issued with a cabin crew licence under this Part, unless he or she has demonstrated or provided proof that he or she meets the language proficiency requirements prescribed in Document SA-CATS 64.

Designation of examiner

- **64.01.9** (1) The Director may designate an examiner to conduct skill tests and to issue skill test reports.
- (2) The privileges referred to in sub-regulation (1) must be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 64.
- (3) The Director must sign and issue to each designated examiner a document which must state the full name of such examiner and contain a statement that
 - (a) such examiner has been designated in terms of sub-regulation (1); and
 - (b) such examiner is empowered to exercise the privileges referred to in subregulation (1).
- (4) An applicant for designation as examiner in terms of sub-regulation (1) must comply with the requirements prescribed in Document SA-CATS 64 and the application must be accompanied by
 - (a) detail of the licence and ratings to which the application applies; and
 - (b) the appropriate fee as prescribed in Part 187.
- (5) A designated testing standards officer or inspector must conduct surveillance over the activities of an examiner on an annual basis, as prescribed in Document SA-CATS 64.
- (6) A designated testing standards officer or inspector may suspend a designation issued in terms of sub-regulation (1) if
 - (a) immediate suspension is necessary in the interest of aviation safety;
 - (b) the designated testing standards officer or inspector is prevented by the designated examiner from carrying out any safety inspection and audit or from performing any of the functions that the designated testing standards officer or inspector is permitted to perform in terms of the Act and these Regulations; or
 - (c) it is evident that the designated examiner does not comply with the relevant requirements prescribed in this Part, after such examiner has been given at least 14 days within which to comply therewith and has been notified of the proposed suspension and the reasons thereof.
- (7) The provisions of regulation 185.00.4 apply, with the necessary changes, with regard to the suspension referred to in sub-regulation (6).

Designation of instructors

- **64.01.10** (1) The Director may designate an instructor to conduct safety and emergency training for cabin crew.
- (2) The privileges referred to in sub-regulation (1) must be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 64.
- (3) An applicant for designation as instructor in terms of sub-regulation (1) must comply with the requirements prescribed in Document SA-CATS 64.
- (4) A designated testing standards officer or inspector must conduct surveillance over the activities of an instructor on an annual basis, as prescribed in Document SA-CATS 64.
- (5) A designated testing standards officer or inspector may suspend a designation issued in terms of sub-regulation (1) if
 - (a) immediate suspension is necessary in the interest of aviation safety;
 - (b) the designated testing standards officer or inspector is prevented by the designated instructor from carrying out any safety inspection and audit or from performing any of the functions that the designated testing standards officer or inspector is permitted to perform in terms of the Act and these Regulations; or
 - (c) it is evident that the designated instructor does not comply with the relevant requirements prescribed in this Part, after such instructor has been given at least 14 days within which to comply therewith and has been notified of the proposed suspension and the purpose thereof.
- (6) The provisions of regulation 185.00.4 apply, with the necessary changes, with regard to the suspension referred to in sub-regulation (5).

Designation of the first aid examiner

- **64.01.11** (1) The Director may designate a first aid examiner to conduct first aid theoretical, practical training and moderate training of designated first aid instructors.
- (2) The procedure and qualifications criteria for designation shall be as prescribed in document SA-CATS 64.
- (3) The privileges referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 64.
- (4) The Director shall sign and issue to each designated first aid examiner a document which shall state the full name of such an examiner, allocate a designated number to the examiner and contain a statement that
 - (a) such examiner has been designated in terms of sub- regulation (1)

- (b) such examiner is empowered to exercise the privileges referred to in subregulation (1).
- (5) An application for designation as referred to in sub-regulation (1) shall be made to the Director in the appropriate form and shall be accompanied by the appropriate fee as prescribed in Part 187.
- (6) An authorized aviation medical inspector shall conduct surveillance over the activities of the first aid examiner on an annual basis, as prescribed in Document SA-CATS 64.
- (7) The Director may withdraw a designation, if it becomes evident that the designated examiner does not comply with the provision of these Regulations.
- (8) The first aid examiner must, upon the withdrawal of the designation by the Director, forthwith surrender all documents issued by the Director.

Designation of the first aid instructor

- **64.01.12** (1) The Director may designate a first aid instructor to conduct first aid theoretical, practical training.
- (2) The procedure and qualifications criteria for designation shall be as prescribed in document SA-CATS 64.
- (3) The privileges referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 64.
- (4) The Director shall sign and issue to each designated first aid instructor a document which shall state the full name of such an instructor, allocate a designation number and contain a statement that
 - (a) such instructor has been designated in terms of sub- regulation (1).
 - (b) such instructor is empowered to exercise the privileges referred to in subregulation (1).
- (5) An application for designation as referred to in sub-regulation (1) shall be made to the Director in the appropriate form and shall be accompanied by the appropriate fee as prescribed in Part 187.
- (6) An authorized aviation medical inspector shall conduct surveillance over the activities of the First Aid Instructor on an annual basis, as prescribed in Document SA-CATS 64.
- (7) The Director may withdraw a designation, if it becomes evident that the first aid instructor does not comply with the provision of these Regulations.

(8) The first aid instructor must, upon the withdrawal of the designation by the Director, forthwith surrender all documents issued by the Director.

Training

64.01.13 Training as required by this Part shall only be provided by the holder of an ATO approval issued in terms of Part 141.

Validation of a licence and rating or competency card issued by appropriate authority

- **64.01.14** (1) The holder of a licence and rating or competency card issued by an appropriate authority, who desires to act as a cabin crew member on a South African registered aircraft, shall apply to the Director in the appropriate prescribed form, for a validation of such licence, rating or competency card.
- (2) The application for a validation referred to in sub-regulation (1) shall be accompanied by
 - (a) the documents listed in Document SA-CATS 64; and
 - (b) the appropriate fee as prescribed in Part 187.
- (3) The Director may validate a licence, rating or competency card issued by an appropriate authority–
 - (a) if the Director is of the opinion that the standard of such licence, rating or competency card is equivalent to, or higher than, the standard prescribed in this Part for the issuing of a cabin crew licence;
 - (b) subject to the same restrictions that apply to such licence, rating or competency card to be validated; and
 - (c) subject to such additional conditions and limitations as the Director may consider necessary in the interest of aviation safety.
- (4) The Director may, to ensure compatibility with the standards prescribed in this Part for the issuing of a cabin crew licence, require the applicant
 - (a) to undergo bridging training and prescribe the extent of such training on an individual basis; and
 - (b) to undergo further assessment of competency.
- (5) The duration of a validation shall be
 - (a) 12 months calculated from the date of issue of such a validation; or
 - (b) the period of validity of the licence, rating or competency card issued by the appropriate authority concerned, whichever period is the lesser period.

- (6) The holder of a validation may, subject to the provisions of sub-regulation (7), apply to the Director for the renewal of such validation which shall be done at least 21 days immediately preceding the date of expiry of such validation.
- (7) The Director may renew a validation of a licence, rating or competency card in the circumstances and on conditions as prescribed in Document SA-CATS 64: Provided that a validation of a licence, rating or competency card, the privileges of which are to be exercised for commercial purposes, may only be renewed for the same period as referred to in sub-regulation (5).
- (8) The holder of a validation shall comply with the provisions prescribed in this part and the requirements and conditions as prescribed in Document SA-CATS 64.

SUBPART 2: CABIN CREW MEMBER LICENCE

Requirements for cabin crew member licence

- **64.02.1** An applicant for the issuing of a cabin crew member licence shall
 - (a) be not less than 18 years of age;
 - (b) hold a valid Class 2 medical certificate issued in terms of Part 67:
 - (c) have successfully completed the training referred to in regulation 64.02.2;
 - (d) have passed the theoretical knowledge examination referred to in regulation 64.02.3; and
 - (e) have undergone the skills test referred to in regulation 64.02.4.

Training

- **64.02.2** (1) An applicant for the issuing of a cabin crew member licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 64.
- (2) The training referred to in sub-regulation (1) shall be conducted by an instructor accredited by the Director as prescribed in Document SA-CATS 64.

Theoretical knowledge examination

- **64.02.3** (1) An applicant for the issuing of a cabin crew member licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 64.
- (2) The applicant who fails a theoretical knowledge examination, may apply for retesting after the appropriate period specified in Document SA-CATS 64.

Skills test

64.02.4 (1) An applicant for the issuing of a cabin crew member licence shall demonstrate to a designated examiner, the ability to perform as cabin crew member of an aircraft, the procedures as prescribed in Document SA-CATS 64, with a degree of competency appropriate to the privileges granted to the holder of a cabin crew member licence.

(2) The applicant shall undergo the skills test referred to in sub-regulation (1) within six months of passing the theoretical knowledge examination referred to in regulation 64.02.3 and within the 90 days immediately preceding the date of application.

Application for cabin crew member licence

- **64.02.5** An application for the issuing of a cabin crew member licence shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) original or certified proof of
 - (aa) the identity of the applicant; and
 - (bb) the age of the applicant;
 - (ii) a valid Class 2 medical certificate issued in terms of Part 67;
 - (iii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 64.02.3;
 - (iv) the skill test report as prescribed in Document SA-CATS 64, signed by a designated examiner;
 - (v) the appropriate fee as prescribed in Part 187; and
 - (vi) two recent passport size photographs of the applicant.

Issuing of cabin crew member licence

- **64.02.6** (1) The Director shall issue a cabin crew member licence if the applicant complies with the requirements referred to in regulation 64.02.1.
- (2) A licence shall be issued on the appropriate prescribed form.
- (3) Upon the issuing of a licence the holder thereof shall forthwith affix his or her signature in ink in the space on the licence provided for such purpose.

Period of validity

- **64.02.7** A cabin crew member licence shall be valid for an indefinite period: Provided that the privileges of such licence shall not be exercised by the holder thereof unless
 - (a) he or she is the holder of a valid Class 2 medical certificate issued in terms of Part 67: and
 - (b) he or she undergoes the recurrent training prescribed in Part 121.

Privileges

64.02.8 The holder of a valid cabin crew member licence shall be entitled to act as a cabin crew member for the type of aircraft in respect of which the holder received his or her training referred to in regulation 64.02.2 and which is specified on such licence.

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SUBPART 1: GENERAL

Applicability

65.01.1 This Part applies to –

- (a) the issuing of air traffic service licences, ratings, validations and certificates for South African air traffic service personnel, the privileges and limitations of such licences, ratings, validations and certificates, and matters related thereto; and
- (b) the conversion of foreign air traffic service licences and ratings and the privileges and limitations of such conversions.

Authority to provide air traffic service

- **65.01.2** (1) No person shall provide an air traffic service within any airspace in the Republic, unless such person holds a valid air traffic service licence and rating complying with the requirements in this Part and appropriate to the duties being performed.
- (2) The holder of an air traffic service licence shall not exercise privileges other than the privileges granted by the licence and the appropriate valid rating held by such holder.
- (3) The provisions of sub-regulations (1) and (2) shall not apply to any airspace designated for military use.

(4) The holder of an air traffic licence shall pay the annual currency fees as prescribed in Part 187, applicable to the type of licence, on the anniversary date of such licence.

Conversion of licence or rating issued by appropriate authority

- **65.01.3** (1) The holder of a licence or rating issued by an appropriate authority, who desires to obtain a licence or rating issued under this Part, shall apply to the Director in the appropriate prescribed form, for a conversion of such licence or rating.
- (2) The application for a conversion referred to in sub-regulation (1) shall be accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the licence to which the conversion pertains;
 - (c) a valid medical certificate; and
 - (d) in the case of an application for the conversion of a licence or rating for the purpose of being employed as an air traffic service personnel member in the Republic, a temporary work permit or permanent residency permit and a letter of appointment from a South African employer who requires the services of the applicant.
- (3) A licence or rating issued by an appropriate authority may be recognised by the Director subject to the same restrictions which apply to such licence or rating and in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 65.
- (4) A licence or rating issued by an appropriate authority may be converted by the Director in the appropriate prescribed form.
- (5) The holder of a licence or rating issued by an appropriate authority and converted by the Director, shall at all times comply with the regulations in this part and the requirements and conditions as prescribed in Document SA-CATS 65.

Medical fitness

- **65.01.4** An applicant for or holder of an air traffic service licence shall
 - (a) in the case of an air traffic controller, obtain a Class 3 medical certificate; or
 - (b) in the case of an air traffic service assistant, obtain a Class 4 medical certificate, issued in terms of Part 67.

Maximum hours of duty

65.01.5 The maximum hours of duty of air traffic service personnel for the purposes of aviation safety, shall be as prescribed in Document SA-CATS 65.

Ratings and certificates

- **65.01.6** (1) The air traffic service ratings are
 - (a) an air traffic service assistant rating;
 - (b) an air traffic service assistant (co-ordinator) rating;
 - (c) an air traffic service assistant (clearance delivery) rating;
 - (d) an air traffic service assistant (flight information service) rating;
 - (e) an air traffic service assistant (aerodrome flight information service) rating;
 - (f) an aerodrome control rating;
 - (g) an approach control rating;
 - (h) an area control rating;
 - (i) an approach control (surveillance) rating;
 - (j) an area control (surveillance) rating;
 - (k) a Grade One air traffic service instructor (operational) rating; and
 - (I) a Grade Two air traffic service instructor (operational) rating.
- (2) The air traffic service certificates are -
 - (a) a Grade One air traffic service instructor (training organisation) certificate; and
 - (b) a Grade Two air traffic service instructor (training organisation) certificate.

Register of licences

- **65.01.7** (1) The Director shall maintain a register of all air traffic service licences issued or converted, ratings validated and certificates issued in terms of this part.
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the licence;
 - (b) the postal address of the holder of the licence;
 - (c) the date on which the licence was issued or converted;
 - (d) particulars of the ratings, validations and certificates held by the holder of the licence; and
 - (e) the nationality of the holder of the licence.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence is issued or converted, or a rating is validated or a certificate is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Language

65.01.8 Air traffic service personnel shall have sufficient ability in reading, speaking and understanding the English language to enable them to adequately carry out their responsibilities as air traffic service personnel and have attained a minimum of ICAO level 4 in their English language proficiency examination.

Designation of validation examiners and rating assessment examiners

- 65.01.9 (1) The Director may designate -
 - (a) a validation examiner (operational) to conduct proficiency checks and to issue certificates of competency and temporary validation certificates;
 - (b) a rating assessment examiner (training organisation) to conduct assessments, instructor proficiency checks and to issue rating certificates of competency and temporary rating certificates.
- (2) The privileges referred to in sub-regulation (1) (a) and (b) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 65.
- (3) The Director shall sign and issue to each designated validation examiner or designated rating assessment examiner a document which shall state the full name of such validation examiner or rating assessment examiner and contain a statement that
 - (a) such validation examiner or rating assessment examiner has been designated in terms of sub-regulation (1) (a) or (b), as the case may be; and
 - (b) such validation examiner or rating assessment examiner is empowered to exercise the privileges referred to in sub-regulation (1) (a) or (b), as the case may be.

Air traffic service training organisation

65.01.10 Training as required by this part shall only be provided by an air traffic service training organisation designated in terms of Part 141.

Consumption of alcohol and drugs

- **65.01.11** (1) No air traffic service personnel member shall
 - (a) consume any liquor less than 8 hours prior to the specified reporting time for operational duty or the commencement of a shift;
 - (b) commence an operational duty period while the concentration of alcohol in any specimen of blood taken from any part of his or her body is more than 0,02 gram per 100 milliliters;
 - (c) consume alcohol during the operational duty period or whilst on standby for operational duty;

- (d) commence an operational duty period while under the influence of liquor or any drug having narcotic effect;
- (e) exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance which might render him or her unable to safely and properly exercise these privileges; and
- (f) engage in any problematic use of substances.
- (2) An air traffic service personnel member who engage in any problematic use of substances must be identified and shall be denied the right to exercise the privileges of his or her licence.
- (3) Reconsideration of the right to exercise the privileges of his or her licence shall only take place
 - (a) after successful treatment; or
 - (b) in cases where no treatment is deemed necessary, after cessation of the problematic use of substances, and upon determination of the fact that the personnel member is unlikely to jeopardise safety in the performance of his or her duties.
- (4) Re-instatement of privileges shall only be considered after
 - (a) certification by a medical practitioner that the personnel member has received effective and acceptable treatment and that the applicant is free from any effect of a psychoactive substance (where applicable);
 - (b) a signed declaration by the personnel member stating that he or she is no longer using the psychoactive substance nor intends to use the substance in future; and
 - (c) signed consent by the personnel member of his or her willingness to submit to one or more drug tests if and when required by the Director.

SUBPART 2: AIR TRAFFIC SERVICE LICENCE

Requirements for air traffic service licence

- **65.02.1** An applicant for the issuing of an air traffic service licence shall
 - (a) be not less than 18 years of age;
 - (b) in the case of an air traffic controller, hold a valid Class 3 medical certificate issued in terms of Part 67;
 - (c) in the case of an air traffic service assistant, hold a valid Class 4 medical certificate issued in terms of Part 67;
 - (d) be a resident of the Republic;

- (e) have successfully completed the training referred to in regulation 65.02.2; and
- (f) have passed the theoretical knowledge examination referred to in regulation 65.02.3.

Training

- **65.02.2** (1) An applicant for the issuing of an air traffic service licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.
- (2) Should air traffic service personnel holding a current validation for a particular rating and having held such a validation for a minimum period of 12 months, be required to revalidate the particular rating at a different ATSU, such air traffic service personnel_shall have provided the relevant service, under the supervision of an air traffic service instructor (operational), at an ATSU for which the rating validation is sought, for a period equal to at least 50 percent of the hours relevant to the original rating validation

Theoretical knowledge examination

65.02.3 An applicant for the issuing of an air traffic service licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 65.

Application for air traffic service licence

- 65.02.4 An application for the issuing of an air traffic service licence shall be -
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) original or certified proof of
 - (aa) the identity of the applicant; and
 - (bb) the age of the applicant:
 - (ii) in the case of an air traffic controller, a valid Class 3 medical certificate issued in terms of Part 67;
 - (iii) in the case of an air traffic service assistant, a valid Class 4 medical certificate issued in terms of Part 67;
 - (iv) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (v) the appropriate fee as prescribed in Part 187; and
 - (vi) two recent passport size photographs of the applicant.

Issuing of air traffic service licence

- **65.02.5** (1) The Director shall issue an air traffic service licence if the applicant complies with the requirements referred to in regulation 65.02.1.
- (2) A licence shall be issued in the appropriate prescribed form.

(3) Upon the issuing of a licence the holder thereof shall forthwith affix his or her signature in ink in the space on the licence provided for such purpose.

Period of validity of air traffic service licence

65.02.6 (1) An air traffic service licence shall be valid for an indefinite period: Provided that the privileges of the licence shall not be exercised by the holder thereof unless –

- (a) in the case of an air traffic controller, he or she is the holder of a valid Class 3 medical certificate issued in terms of Part 67;
- (b) in the case of an air traffic service assistant, he or she is the holder of a valid Class 4 medical certificate issued in terms of Part 67:
- (c) he or she holds the appropriate valid rating;
- (d) He or she continually exercises the particular rating in the normal course of duties of employment as per the ATS currency of validation table as prescribed in Document SA-CATS 65;
- (e) he or she maintains competency by complying with the appropriate requirements prescribed in this Part.
- (2) The holder of an air traffic service licence and rating shall submit copies of all documentation reflecting continued maintenance of competency to the Director within 21 days after compliance with the appropriate requirements prescribed in this Part.

Privileges

65.02.7 The holder of a valid air traffic service licence shall be entitled to –

- (a) provide the air traffic service at the ATSU for which the rating held by him or her is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65;
- (b) act as an air traffic service instructor (operational) if he or she is suitably rated; and
- (c) act as a validation examiner if he or she is -
 - (i) designated by the Director in terms of regulation 65.01.9 to act as such;
 - (ii) in possession of a Grade One air traffic service instructor (operational) rating:
- (d) act as an air traffic service instructor (training organisation) if he or she holds the appropriate certificate;
- (e) act as a rating assessment examiner if he or she is
 - (i) designated by the Director in terms of regulation 65.01.9 to act as such; and
 - (ii) in possession of a Grade One air traffic service instructor (training organisation) certificate.

SUBPART 3: AIR TRAFFIC SERVICE ASSISTANT RATING

Requirements for air traffic service assistant rating

- **65.03.1** An applicant for the issuing of an air traffic service assistant rating shall
 - (a) be not less than 18 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.03.2.

Training

65.03.2 An applicant for the issuing of an air traffic service assistant rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of air traffic service assistant rating

- **65.03.3** An application for the issuing of an air traffic service assistant rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of air traffic service assistant rating

- **65.03.4** (1) The Director shall issue an air traffic service assistant rating if the applicant complies with the requirements referred to in regulation 65.03.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months calculated from the date on which such rating was issued.

Requirements for validation of air traffic service assistant rating

65.03.5 An applicant for the validation of an air traffic service assistant rating shall, under the supervision of an air traffic service instructor (operational), have provided assistant services at the ATSU for which the rating is sought for at least 50 hours.

Application for validation of air traffic service assistant rating

- **65.03.6** An application for the validation of an air traffic service assistant rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -

- (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 63.03.5 has been accumulated within the six months immediately preceding the application;
- (ii) the air traffic service licence and rating held by the applicant; and
- (iii) the appropriate fee as prescribed in Part 187.

Validation of air traffic service assistant rating

- **65.03.7** (1) The Director shall validate an air traffic service assistant rating if the applicant complies with the requirements referred to in regulation 65.03.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of air traffic service assistant rating

- **65.03.8** The holder of a valid air traffic service assistant rating shall be entitled to
 - (a) provide assistant services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
 - (b) use such equipment to provide such assistant services, as appropriate.

Duration or renewal of air traffic service assistant rating

65.03.9 An air traffic service assistant rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of air traffic service assistant validation

- **65.03.10** (1) An air traffic service assistant validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.03.10 or 65.03.11, as the case may be.
- (2) To renew an air traffic service assistant validation, the holder thereof shall, prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-

CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9 and 65.13.9.

- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.03.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements or revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired air traffic service assistant rating

- **65.03.11** (1) An air traffic service assistant rating that has expired may be renewed not later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment confirming that the skills referred to in regulation 65.03.2 have been retained or re-acquired.
- (2) The Director may re-issue an air traffic service assistant rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof provided the applicant complies with the requirements as stipulated in regulation 65.03.6
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.03.2 (7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.03.3 and 65.03.6 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 4: AIR TRAFFIC SERVICE ASSISTANT (CO-ORDINATOR) RATING

Requirements for air traffic service assistant (co-ordinator) rating

- **65.04.1** An applicant for the issuing of an air traffic service assistant (co-ordinator) rating shall
 - (a) be not less than 18 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.04.2.

Training

65.04.2 An applicant for the issuing of an air traffic service assistant (co-ordinator) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of air traffic service assistant (co-ordinator) rating

65.04.3 An application for the issuing of an air traffic service assistant (co-ordinator) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of air traffic service assistant (co-ordinator) rating

- **65.04.4** (1) The Director shall issue an air traffic service assistant (co-ordinator) rating if the applicant complies with the requirements referred to in regulation 65.04.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of air traffic service assistant (co-ordinator) rating

65.04.5 An applicant for the validation of an air traffic service assistant (co-ordinator) rating shall, under the supervision of an air traffic service instructor (operational), have provided assistant services and co-ordination services at the ATSU for which the rating is sought for at least 100 hours.

Application for validation of air traffic service assistant (co-ordinator) rating

65.04.6 An application for the validation of an air traffic service assistant (co-ordinator) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -

- (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner;
- (ii) the air traffic service licence and rating held by the applicant; and
- (iii) the appropriate fee as prescribed in Part 187.

Validation of air traffic service assistant (co-ordinator) rating

- **65.04.7** (1) The Director shall validate an air traffic service assistant (co-ordinator) rating if the applicant complies with the requirements referred to in regulation 65.04.5.
- (2) The rating shall be validated in the appropriate form as prescribed by the Director and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of air traffic service assistant (co-ordinator) rating

65.04.8 The holder of a valid air traffic service assistant (co-ordinator) rating shall be entitled to –

- (a) provide assistant services and co-ordination services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
- (b) use such equipment to provide such assistant services and co-ordination services, as appropriate.

Duration or renewal of air traffic service assistant (co-ordinator) rating

65.04.9 An air traffic service assistant (co-ordinator) rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of air traffic service assistant (co-ordinator) validation

- **65.04.10** (1) An air traffic service assistant (co-ordinator) validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.04.11, as the case may be.
- (2) To renew an air traffic service assistant (co-ordinator) validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.

- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.04.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired air traffic service assistant (co-ordinator) rating

- **65.04.11** (1) An air traffic service assistant (co-ordinator) rating that has expired may be renewed not later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment confirming that the skills referred to in regulation 65.04.2 have been retained or re-acquired.
- (2) The Director may re-issue an air traffic service assistant (co-ordinator) rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.04.2(7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.04.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 5: AIR TRAFFIC SERVICE ASSISTANT (CLEARANCE DELIVERY) RATING

Requirements for air traffic service assistance (clearance delivery) rating

- **65.05.1** An applicant for the issuing of an air traffic service assistant (clearance delivery) rating shall
 - (a) be not less than 18 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.05.2.

Training

65.05.2 An applicant for the issuing of an air traffic service assistant (clearance delivery) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of air traffic service assistant (clearance delivery) rating

65.05.3 An application for the issuing of an air traffic service assistant (clearance delivery) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of air traffic service assistant (clearance delivery) rating

- **65.05.4** (1) The Director shall issue an air traffic service assistant (clearance delivery) rating if the applicant complies with the requirements referred to in regulation 65.05.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of air traffic service assistant (clearance delivery) rating

65.05.5 An applicant for the validation of an air traffic service assistant (clearance delivery) rating shall, under the supervision of an air traffic service instructor (operational), have provided assistant services and clearance delivery services at the ATSU for which the rating validation is sought for at least 50 hours.

Application for validation of air traffic service assistant (clearance delivery) rating

65.05.6 An application for the validation of an air traffic service assistant (clearance delivery) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience

- specified in regulation 65.05.5 has been accumulated within the six months immediately preceding the application;
- (ii) the air traffic service licence and rating held by the applicant; and
- (iii) the appropriate fee as prescribed in Part 187.

Validation of air traffic service assistant (clearance delivery) rating

- **65.05.7** (1) The Director shall validate an air traffic service assistant (clearance delivery) rating if the applicant complies with the requirements referred to in regulation 65.05.5.
- (2) The rating shall be validated in the appropriate form as prescribed in Document SA-CATS 65 and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of air traffic service assistant (clearance delivery) rating

65.05.8 The holder of a valid air traffic service assistant (clearance delivery) rating shall be entitled to –

- (a) provide assistant services and clearance delivery services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
- (b) use such equipment to provide such assistant services and clearance delivery services, as appropriate.

Duration or renewal of air traffic service assistant (clearance delivery) rating

65.05.9 An air traffic service assistant (clearance delivery) rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of air traffic service assistant (clearance delivery) validation

- **65.05.10** (1) An air traffic service assistant (clearance delivery) validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.05.11, as the case may be.
- (2) To renew an air traffic service assistant (clearance delivery) validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.

- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.05.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired air traffic service assistant (clearance delivery) rating

- **65.05.11** (1) An air traffic service assistant (clearance delivery) rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.05.2 have been retained or re-acquired.
- (2) The Director may re-issue an air traffic service assistant (clearance delivery) rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.05.2(7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.05.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 6: AIR TRAFFIC SERVICE ASSISTANT (FLIGHT INFORMATION SERVICE) RATING

Requirements for air traffic service assistant (flight information service) rating

65.06.1 An applicant for the issuing of an air traffic service assistant (flight information service) rating shall –

- (a) be not less than 18 years of age;
- (b) hold a valid air traffic service licence; and
- (c) have successfully completed the training referred to in regulation 65.06.2.

Training

65.06.2 An applicant for the issuing of an air traffic service assistant (flight information service) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of air traffic service assistant (flight information service) rating

65.06.3 An application for the issuing of an air traffic service assistant (flight information service) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of air traffic service assistant (flight information service) rating

- **65.06.4** (1) The Director shall issue an air traffic service assistant (flight information service) rating if the applicant complies with the requirements referred to in regulation 65.06.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of air traffic service assistant (flight information service) rating

65.06.5 An applicant for the validation of an air traffic service assistant (flight information service) rating shall, under the supervision of an air traffic service instructor (operational), have provided assistant services and flight information services at the ATSU for which the rating is sought for at least 50 hours but not more than 100 hours.

Application for validation of air traffic service assistant (flight information service) rating

65.06.6 An application for the validation of an air traffic service assistant (flight information service) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -

- (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 65.06.5 has been accumulated within the six months immediately preceding the application;
- (ii) the air traffic service licence and rating held by the applicant; and
- (iii) the appropriate fee as prescribed in Part 187.

Validation of air traffic service assistant (flight information service) rating

- **65.06.7** (1) The Director shall validate an air traffic service assistant (flight information service) rating if the applicant complies with the requirements referred to in regulation 65.06.5.
- (2) The rating shall be validated in the appropriate form as prescribed in Document SA-CATS 65 and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of air traffic service assistant (flight information service) rating

- **65.06.8** The holder of a valid air traffic service assistant (flight information service) rating shall be entitled to
 - (a) provide assistant services and flight information services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
 - (b) use such equipment to provide such assistant services and flight information services, as appropriate.

Duration or renewal of air traffic service assistant (flight information service) rating

65.06.9 An air traffic service assistant (flight information service) rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of air traffic service assistant (flight information service) validation

- **65.06.10** (1) An air traffic service assistant (flight information service) validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.06.11, as the case may be.
- (2) To renew an air traffic service assistant (flight information service) validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.

- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.06.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of expired air traffic service assistant (flight information service) rating

- **65.06.11** (1) An air traffic service assistant (flight information service) rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.06.2 have been retained or re-acquired.
- (2) The Director may re-issue an air traffic service assistant (flight information service) rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training:
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.06.02 (7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.06.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 7: AIR TRAFFIC SERVICE ASSISTANT (AERODROME FLIGHT INFORMATION SERVICE) RATING

Requirements for air traffic service assistant (aerodrome flight information service) rating

- **65.07.1** An applicant for the issuing of an air traffic service assistant (aerodrome flight information service) rating shall
 - (a) be not less than 18 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.07.2.

Training

65.07.2 An applicant for the issuing of an air traffic service assistant (aerodrome flight information service) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of air traffic service assistant (aerodrome flight information service) rating

- **65.07.3** An application for the issuing of an air traffic service assistant (aerodrome flight information service) rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of air traffic service assistant (aerodrome flight information service) rating

- **65.07.4** (1) The Director shall issue an air traffic service assistant (aerodrome flight information service) rating if the applicant complies with the requirements referred to in regulation 65.07.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of air traffic service assistant (aerodrome flight information service) rating

65.07.5 An applicant for the validation of an air traffic service assistant (aerodrome flight information service) rating shall, under the supervision of an air traffic service instructor (operational), have provided assistant services and aerodrome flight information services at the ATSU for which the rating validation is sought for at least 50 hours.

Application for validation of air traffic service assistant (aerodrome flight information service) rating

65.07.6 An application for the validation of an air traffic service assistant (aerodrome flight information service) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner, confirming that the experience specified in regulation 65.07.5 has been accumulated within the six months immediately preceding the application;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.

Validation of air traffic service assistant (aerodrome flight information service) rating

- **65.07.7** (1) The Director shall validate an air traffic service assistant (aerodrome flight information service) rating if the applicant complies with the requirements referred to in regulation 65.07.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of air traffic service assistant (aerodrome flight information service) rating

65.07.8 The holder of a valid air traffic service assistant (aerodrome flight information service) rating shall be entitled to –

- (a) provide assistant services and aerodrome flight information services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
 - (b) use such equipment to provide such assistant services and aerodrome flight information services, as appropriate.

Duration or renewal of air traffic service assistant (aerodrome flight information service) rating

65.07.9 An air traffic service assistant (aerodrome flight information service) rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of air traffic service assistant (aerodrome flight information service) validation

- **65.07.10** (1) An air traffic service assistant (aerodrome flight information service) validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.07.11, as the case may be.
- (2) To renew an air traffic service assistant (aerodrome flight information service) validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.07.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired air traffic service assistant (aerodrome flight information service) rating

- **65.07.11** (1) An air traffic service assistant (aerodrome flight information service) rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.07.2 have been retained or re-acquired.
- (2) The Director may re-issue an air traffic service assistant (aerodrome flight information service) rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.07.2(7) in Document SA-CATS 65.

- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2.
- (4) The provisions of regulation 65.07.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 8: AERODROME CONTROL RATING

Requirements for aerodrome control rating

65.08.1 An applicant for the issuing of an aerodrome control rating shall -

- (a) be not less than 19 years of age;
- (b) hold a valid air traffic service licence; and
- (c) have successfully completed the training referred to in regulation 65.08.2.

Training

65.08.2 An applicant for the issuing of an aerodrome control rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of aerodrome control rating

65.08.3 An application for the issuing of an aerodrome control rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of aerodrome control rating

- **65.08.4** (1) The Director shall issue an aerodrome control rating if the applicant complies with the requirements referred to in regulation 65.08.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of aerodrome control rating

65.08.5 An applicant for the validation of an aerodrome control rating shall, under the supervision of an air traffic service instructor (operational), have provided aerodrome control services at the ATSU for which the rating validation is sought for at least 100 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining to the position for which the validation is sought.

Application for validation of aerodrome control rating

65.08.6 An application for the validation of an aerodrome control rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by
 - (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 65.08.5 has been accumulated within the six months immediately preceding the application;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.

Validation of aerodrome control rating

- **65.08.7** (1) The Director shall validate an aerodrome control rating if the applicant complies with the requirements referred to in regulation 65.08.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of aerodrome control rating

65.08.8 The holder of a valid aerodrome control rating shall be entitled to –

- (a) provide aerodrome control services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
- (b) use such equipment to provide such aerodrome control services, as appropriate.

Duration or renewal of aerodrome control rating

65.08.9 An aerodrome control rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of aerodrome control validation

- **65.08.10** (1) An aerodrome control validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.08.11, as the case may be.
- (2) To renew an aerodrome control validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulations 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.08.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.".

Renewal and re-issue of an expired aerodrome control rating

- **65.08.11** (1) An aerodrome control rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.08.2 have been retained or re-acquired.
- (2) The Director may re-issue an aerodrome control rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.08.2(7) in Document SA-CATS 65.

- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.08.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 9: APPROACH CONTROL RATING

Requirements for approach control rating

65.09.1 An applicant for the issuing of an approach control rating shall –

- (a) be not less than 21 years of age;
- (b) hold a valid air traffic service licence; and
- (c) have successfully completed the training referred to in regulation 65.09.2.

Training

65.09.2 An applicant for the issuing of an approach control rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of approach control rating

65.09.3 An application for the issuing of an approach control rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of approach control rating

- **65.09.4** (1) The Director shall issue an approach control rating if the applicant complies with the requirements referred to in regulation 65.09.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of approach control rating

65.09.5 An applicant for the validation of an approach control rating shall, under the supervision of an air traffic service instructor (operational), have provided approach control services at the ATSU for which the rating validation is sought for at least 200 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining to the position for which the validation is sought.

Application for validation of approach control rating

65.09.6 An application for the validation of an approach control rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 65.09.5 has been accumulated within the six months immediately preceding the application;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.

Validation of approach control rating

- **65.09.7** (1) The Director shall validate an approach control rating if the applicant complies with the requirements referred to in regulation 65.09.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of approach control rating

65.09.8 The holder of a valid approach control rating shall be entitled to –

- (a) provide approach control services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SACATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
- (b) use such equipment to provide such approach control services, as appropriate.

Duration or renewal of approach control rating

65.09.9 An approach control rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of approach control validation

- **65.09.10** (1) An approach control validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.09.11, as the case may be.
- (2) To renew an approach control validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.09.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired approach control rating

- **65.09.11** (1) An approach control rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.09.2 have been retained or re-acquired.
- (2) The Director may re-issue an approach control rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.09.2(7) in Document SA-CATS 65.

- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.09.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 10: AREA CONTROL RATING

Requirements for area control rating

- **65.10.1** An applicant for the issuing of an area control rating shall
 - (a) be not less than 21 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.10.2.

Training

65.10.2 An applicant for the issuing of an area control rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of area control rating

- **65.10.3** An application for the issuing of an area control rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of area control rating

- **65.10.4** (1) The Director shall issue an area control rating if the applicant complies with the requirements referred to in regulation 65.10.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of area control rating

65.10.5 An applicant for the validation of an area control rating shall, under the supervision of an air traffic service instructor (operational), have provided area control services at the ATSU for which the rating is sought for at least 200 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining to the position for which the validation is sought.

Application for validation of area control rating

- **65.10.6** An application for the validation of an area control rating shall be—
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 65.10.5 has been accumulated within the six months immediately preceding the application;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.

Validation of area control rating

- **65.10.7** (1) The Director shall validate an area control rating if the applicant complies with the requirements referred to in regulation 65.10.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of area control rating

- **65.10.8** The holder of a valid area control rating shall be entitled to
 - (a) provide area control services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
 - (b) use such equipment to provide such area control services, as appropriate.

Duration or renewal of area control rating

65.10.9 An area control rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of area control validation

- **65.10.10** (1) An area control validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.10.11, as the case may be.
- (2) To renew an area control validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.10.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired area control rating

- **65.10.11** (1) An area control rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.10.2 have been retained or re-acquired.
- (2) The Director may re-issue an area control rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.10.2(7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.10.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 11: APPROACH CONTROL (SURVEILLANCE) RATING

Requirements for approach control (surveillance) rating

- **65.11.1** An applicant for the issuing of an approach control (surveillance) rating shall
 - (a) be not less than 21 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.11.2.

Training

65.11.2 An applicant for the issuing of an approach control (surveillance) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of approach control (surveillance) rating

- **65.11.3** An application for the issuing of an approach control (surveillance) rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of approach control (surveillance) rating

- **65.11.4** (1) The Director shall issue an approach control (surveillance) rating if the applicant complies with the requirements referred to in regulation 65.11.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of approach control (surveillance) rating

65.11.5 An applicant for the validation of an approach control (surveillance) rating shall, under the supervision of an air traffic service instructor (operational), have provided approach control (surveillance) services, in conjunction with the approach control services referred to in subpart 9, at the ATSU for which the rating validation is sought for at least 50 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining to the position for which the validation is sought.

Application for validation of approach control (surveillance) rating

65.11.6 An application for the validation of an approach control (surveillance) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 65.11.5 has been accumulated within the six months immediately preceding the application;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.

Validation of approach control (surveillance) rating

- **65.11.7** (1) The Director shall validate an approach control (surveillance) rating if the applicant complies with the requirements referred to in regulation 65.11.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of approach control (surveillance) rating

- **65.11.8** The holder of a valid approach control (surveillance) rating shall be entitled to
 - (a) provide approach control (surveillance) services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
 - (b) use such equipment to provide such approach control (surveillance) services, as appropriate.

Duration or renewal of approach control (surveillance) rating

65.11.9 An approach control (surveillance) rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of approach control (surveillance) validation

65.11.10 (1) An approach control (surveillance) validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.11.11, as the case may be.

- (2) To renew an approach control (surveillance) validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.
- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.11.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired approach control (surveillance) rating

- **65.11.11** (1) An approach control (surveillance) rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.11.2 have been retained or re-acquired.
- (2) The Director may re-issue an approach control (surveillance) rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training:
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.11.2(7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.11.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 12: AREA CONTROL (SURVEILLANCE) RATING

Requirements for area control (surveillance) rating

- **65.12.1** An applicant for the issuing of an area control (surveillance) rating shall
 - (a) be not less than 21 years of age;
 - (b) hold a valid air traffic service licence; and
 - (c) have successfully completed the training referred to in regulation 65.12.2.

Training

65.12.2 An applicant for the issuing of an area control (surveillance) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of area control (surveillance) rating

- **65.12.3** An application for the issuing of an area control (surveillance) rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of area control (surveillance) rating

- **65.12.4** (1) The Director shall issue an area control (surveillance) rating if the applicant complies with the requirements referred to in regulation 65.12.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of area control (surveillance) rating

65.12.5 An applicant for the validation of an area control (surveillance) rating shall, under the supervision of an air traffic service instructor (operational), have provided area control (surveillance) services, in conjunction with the area control services referred to in subpart 10, at the ATSU for which the rating validation is sought for at least 50 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining to the position for which the validation is sought.

Application for validation of area control (surveillance) rating

- **65.12.6** An application for the validation of an area control (surveillance) rating shall be—
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -

- (i) the appropriate certificate of competency, as prescribed in Document SA-CATS 65, signed by a validation examiner confirming that the experience specified in regulation 65.12.5 has been accumulated within the six months immediately preceding the application;
- (ii) the air traffic service licence and rating held by the applicant; and
- (iii) the appropriate fee as prescribed in Part 187.

Validation of area control (surveillance) rating

- **65.12.7** (1) The Director shall validate an area control (surveillance) rating if the applicant complies with the requirements referred to in regulation 65.12.5.
- (2) The rating shall be validated in the appropriate prescribed form and the validation shall specify the relevant ATS position, where applicable, upon which the holder is entitled to exercise the privileges of the rating.

Privileges of area control (surveillance) rating

- **65.12.8** The holder of a valid area control (surveillance) rating shall be entitled to
 - (a) provide area control (surveillance) services at the ATSU for which the rating is validated, in accordance with the requirements and standards as prescribed in Document SA-CATS 65, if he or she has familiarised himself or herself with all information that is pertinent or current at such ATSU; and
 - (b) use such equipment to provide such area control (surveillance) services, as appropriate.

Duration or renewal of area control (surveillance) rating

65.12.9 An area control (surveillance) rating shall expire if such rating is not validated within 12 months of issue or revalidated within a period of 24 months, calculated from the date on which such rating was validated, or calculated from the date of the last competency assessment completed to renew the validation, as the case may be.

Duration or renewal of area control (surveillance) validation

- **65.12.10** (1) An area control (surveillance) validation shall be valid for a period not exceeding 12 months calculated from the date of validation of the rating or from the date of the last competency assessment completed to renew such validation in accordance with the provisions of this regulation or regulation 65.12.11, as the case may be.
- (2) To renew an area control (surveillance) validation, the holder thereof shall prior to the expiry of the validation, have passed a competency assessment as prescribed in Document SA-CATS 65, conducted by a validation examiner designated in terms of regulation 65.01.9.
- (3) Subject to the provisions of sub-regulation (4), the validation examiner shall provide the Director with a signed certificate of competency as prescribed in Document SA-CATS 65.

- (4) If the result of the competency assessment contemplated in sub-regulation (2) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.12.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing: and
 - (c) immediately inform the holder of the rating that they do not meet the requirements for revalidation of the rating and that they must not exercise the privileges of the rating until such time that they meet the requirements for revalidation or re-issue of the rating.

Renewal and re-issue of an expired area control (surveillance) rating

- **65.12.11** (1) An area control (surveillance) rating that has expired may be renewed no later than 24 months after the expiry of such rating subject to the successful completion of a competency assessment demonstrating that the skills referred to in regulation 65.12.2 have been retained or re-acquired.
- (2) The Director may re-issue an area control (surveillance) rating on application by the holder thereof after a period of 24 months has elapsed from the date of expiry provided that the holder thereof
 - (a) attends refresher training;
 - (b) attends augmentation training on advances or developments in the ATM systems; and
 - (c) has achieved a minimum of 70% pass mark in simulated applicable assessments determined by a validation examiner as indicated in technical standard 65.05.2(7) in Document SA-CATS 65.
- (3) Upon application for the renewal of an expired rating referred to in sub-regulation (2), the Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulation (1) or (2).
- (4) The provisions of regulation 65.12.3 shall apply with the necessary changes to an application referred to in sub-regulation (1).

SUBPART 13: GRADE ONE AIR TRAFFIC SERVICE INSTRUCTOR (OPERATIONAL) RATING

Requirements for Grade One air traffic service instructor (operational) rating

65.13.1 An applicant for the issuing of a Grade One air traffic service instructor (operational) rating shall –

- (a) be not less than 21 years of age;
- (b) hold a valid air traffic service licence:

- (c) hold at least one valid air traffic service rating; and
- (d) have successfully completed the training referred to in regulation 65.13.2.

Training

65.13.2 An applicant for the issuing of a Grade One air traffic service instructor (operational) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of Grade One air traffic service instructor (operational) rating

65.13.3 An application for the issuing of a Grade One air traffic service instructor (operational) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of Grade One air traffic service instructor (operational) rating

- **65.13.4** (1) The Director shall issue a Grade One air traffic service instructor (operational) rating if the applicant complies with the requirements referred to in regulation 65.13.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of Grade One air traffic service instructor (operational) rating

65.13.5 An applicant for the validation of a Grade One air traffic service instructor (operational) rating shall have at least two years practical experience as either an air traffic controller or as an air traffic service assistant as appropriate to the rating being validated.

Application for validation of Grade One air traffic service instructor (operational) rating

- **65.13.6** An application for the validation of a Grade One air traffic service instructor (operational) rating shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by
 - (i) proof of the applicant's competency to exercise the privileges referred to in regulation 65.13.8;
 - (ii) the air traffic service licence and rating held by the applicant; and

(iii) the appropriate fee as prescribed in Part 187.

Validation of Grade One air traffic service instructor (operational) rating

65.13.7 (1) The Director shall validate a Grade One air traffic service instructor (operational) rating if –

- (a) the applicant complies with the requirements referred to in regulation 65.13.5; and
- (b) the Director is satisfied that the applicant is competent to exercise the privileges referred to in regulation 65.13.8.
- (2) The rating shall be validated in the appropriate prescribed form.

Privileges of Grade One air traffic service instructor (operational) rating

65.13.8 (1) The holder of a valid Grade One air traffic service instructor (operational) rating shall be entitled to –

- (a) give operational instruction or on the job training on any of the valid ratings held by him or her;
- (b) act as a validation examiner in any of the valid ratings held by him or her, if designated by the Director in terms of regulation 65.01.9; and
- (c) issue to an air traffic controller or an air traffic service assistant who meets the appropriate requirements prescribed in this part for the validation of a similar rating, a temporary validation certificate.
- (2) A temporary validation certificate referred to in sub-regulation (1)(c), shall
 - (a) be issued in the appropriate prescribed form; and
 - (b) remain valid for a period of not more than 60 days calculated from the date on which the temporary validation certificate was issued or until the date on which the appropriate rating is validated by the Director, whichever period is the lesser period.

Duration of validation or renewal

- **65.13.9** (1) A Grade One air traffic service instructor (operational) rating shall be validated or renewed for a period of 24 months calculated from the date of validation of the rating or from the date of expiry of the rating if such rating is renewed in accordance with the provisions of regulation 65.13.10.
- (2) The rating shall expire if not renewed within a period of 24 months, calculated from the date on which such rating was validated.

Renewal of Grade One air traffic service instructor (operational) rating

- **65.13.10** (1) To renew a Grade One air traffic service instructor (operational) rating, the holder thereof shall within the 90 days immediately preceding the date of expiry of the rating, apply to the Director for the renewal of such rating.
- (2) An application for a renewal of the rating shall be
 - (a) made in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) proof of the applicant's competency to exercise the privileges referred to in regulation 65.13.8;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.
- (3) The Director shall renew the rating if the Director is satisfied that the applicant is competent to exercise the privileges referred to in regulation 65.13.8.
- (4) The rating shall be renewed in the appropriate prescribed form .

SUBPART 14: GRADE TWO AIR TRAFFIC SERVICE INSTRUCTOR (OPERATIONAL) RATING

Requirements for Grade Two air traffic service instructor (operational) rating

- **65.14.1** An applicant for the issuing of a Grade Two air traffic service instructor (operational) rating shall
 - (a) be not less than 21 years of age;
 - (b) hold a valid air traffic service licence;
 - (c) hold at least one valid air traffic service rating; and
 - (d) have successfully completed the training referred to in regulation 65.14.2.

Training

65.14.2 An applicant for the issuing of a Grade Two air traffic service instructor (operational) rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of Grade Two air traffic service instructor (operational) rating

- **65.14.3** An application for the issuing of a Grade Two air traffic service instructor (operational) rating shall be
 - (a) made to the Director in the appropriate form as prescribed by the Director; and
 - (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and

(iv) original or certified proof of his or her age.

Issuing of Grade Two air traffic service instructor (operational) rating

- **65.14.4** (1) The Director shall issue a Grade Two air traffic service instructor (operational) rating if the applicant complies with the requirements referred to in regulation 65.14.1.
- (2) The rating shall be issued in the appropriate prescribed form.
- (3) The rating shall expire if not validated within a period of 12 months, calculated from the date on which such rating was issued.

Requirements for validation of Grade Two air traffic service instructor (operational) rating

65.14.5 An applicant for the validation of a Grade Two air traffic service instructor (operational) rating shall –

- in the case of an air traffic service assistant instructor, have at least six months practical experience in the appropriate rating at the ATSU for which the rating was validated; and
- (b) in the case of an air traffic controller instructor, have at least 12 months practical experience in the appropriate rating at the ATSU for which the rating was validated.

Application for validation of Grade Two air traffic service instructor (operational) rating

65.14.6 An application for the validation of a Grade Two air traffic service instructor (operational) rating shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a validation examiner;
 - (ii) the air traffic service licence and rating held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.

Validation of Grade Two air traffic service instructor (operational) rating

- **65.14.7** (1) The Director shall validate a Grade Two air traffic service instructor (operational) rating if the applicant complies with the requirements referred to in regulation 65.14.5.
- (2) The rating shall be validated in the appropriate prescribed form.

Privileges of Grade Two air traffic service instructor (operational) rating

65.14.8 The holder of a valid Grade Two air traffic service instructor (operational) rating shall be entitled to give operational instruction or on the job training on any of the valid ratings held by him or her.

Duration of validation or renewal

- **65.14.9** (1) A Grade Two air traffic service instructor (operational) rating shall be validated or renewed for a period of 12 months calculated from the date of validation of the rating or from the date of expiry of the rating if such rating is renewed in accordance with the provisions of regulation 65.14.10.
- (2) The rating shall expire if not renewed within a period of 24 months, calculated from the date on which such rating was validated.

Renewal of Grade Two air traffic service instructor (operational) rating

- **65.14.10** (1) To renew a Grade Two air traffic service instructor (operational) rating, the holder thereof shall within the 90 days immediately preceding the date of expiry of the rating, have passed a proficiency check as prescribed in Document SA-CATS 65, conducted by a validation examiner.
- (2) Subject to the provisions of sub-regulation (3), the validation examiner referred to in sub-regulation (1) shall
 - (a) provide the Director with the appropriate certificate of competency as prescribed in Document SA-CATS 65; and
 - (b) sign the appropriate page of the licence of the holder of the rating.
- (3) If the result of the proficiency check contemplated in sub-regulation (1) reveals that the holder of the rating has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.14.8, the validation examiner shall
 - (a) report such result to the Director;
 - (b) suspend the applicable validation in writing; and
 - (c) not sign the appropriate page of the licence of the holder of the rating.

SUBPART 15: GRADE ONE AIR TRAFFIC SERVICE INSTRUCTOR (TRAINING ORGANISATION) CERTIFICATION

Requirements for Grade One air traffic service instructor (training organisation) certification

- **65.15.1** An applicant for the issuing of a Grade One air traffic service instructor (training organisation) certificate shall
 - (a) be not less than 21 years of age;
 - (b) hold an air traffic service licence;
 - (c) hold or have held and have validated the appropriate ratings for which ATS Instruction is to be provided;
 - (d) have at least two years practical experience on the air traffic service rating which has been validated; and

(e) have successfully completed the training referred to in regulation 65.15.2.

Training

65.15.2 An applicant for the issuing of a Grade One air traffic service instructor (training organisation) certificate shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of Grade One air traffic service instructor (training organisation) certificate

65.15.3 An application for the issuing of a Grade One air traffic service instructor (training organisation) certificate shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) proof of the applicant's competency to exercise the privileges referred to in regulation 65.15.5;
 - (ii) the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of Grade One air traffic service instructor (training organisation) certificate

65.15.4 (1) The Director shall issue a Grade One air traffic service instructor (training organisation) certificate if –

- (a) the applicant complies with the requirements referred to in regulation 65.15.1; and
- (b) the Director is satisfied that the applicant is competent to exercise the privileges referred to in regulation 65.15.5.
- (2) The certificate shall be issued in the appropriate prescribed form.

Privileges of Grade One air traffic service instructor (training organisation) certificate

65.15.5 (1) The holder of a Grade One air traffic service instructor (training organisation) certificate shall be entitled to –

- (a) give academic or practical simulator instruction on any of the valid ratings which has been held by him or her;
- (b) act as a rating assessment examiner in any of the ratings held by him or her, if designated by the Director in terms of regulation 65.01.9; and
- (c) issue to an air traffic controller or an air traffic service assistant who meets the appropriate requirements prescribed in this part for the issuing of a similar rating, a temporary rating certificate.
- (2) A temporary rating certificate referred to in sub-regulation (1)(c), shall –

- (a) be issued in the appropriate prescribed form; and
- (b) remain valid for a period of not more than 60 days calculated from the date on which the temporary rating certificate was issued or until the date on which the appropriate rating is issued by the Director, whichever period is the lesser period.

Duration of certificate and renewal

65.15.6 A Grade One air traffic service instructor (training organisation) certificate shall be issued or renewed for a period of 24 months calculated from the date on which the certificate was issued or from the date of expiry of the certificate if such certificate is renewed in accordance with the provisions of regulation 65.15.7.

Renewal of Grade One air traffic service instructor (training organisation) certificate

- **65.15.7** (1) To renew a Grade One air traffic service instructor (training organisation) certificate, the holder thereof shall within the 90 days immediately preceding the date of expiry of the certificate, apply to the Director for the renewal of such certificate.
- (2) An application for a renewal of the certificate shall be
 - (a) made in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) proof of the applicant's competency to exercise the privileges referred to in regulation 65.15.5;
 - (ii) the air traffic service licence held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187.
- (3) The Director shall renew the certificate if the Director is satisfied that the applicant is competent to exercise the privileges referred to in regulation 65.15.5.
- (4) The certificate shall be renewed in the appropriate prescribed form.

SUBPART 16: GRADE TWO AIR TRAFFIC SERVICE INSTRUCTOR (TRAINING ORGANISATION) CERTIFICATION

Requirements for Grade Two air traffic service instructor (training organisation) certification

- **65.16.1** An applicant for the issuing of a Grade Two air traffic service instructor (training organisation) certificate shall
 - (a) be not less than 21 years of age;
 - (b) hold an air traffic service licence;

- (c) hold or have held the appropriate validated air traffic service ratings relevant to the instruction discipline prescribed in this Part, and in the case of approach, a validated aerodrome rating shall also be required;
- (d) have at least two years practical experience on the air traffic service rating which has been validated; and
- (e) have successfully completed the training referred to in regulation 65.16.2.

Training

65.16.2 An applicant for the issuing of a Grade Two air traffic service instructor (training organisation) certificate shall have successfully completed the appropriate training as prescribed in Document SA-CATS 65.

Application for issuing of Grade Two air traffic service instructor (training organisation) certificate

65.16.3 An application for the issuing of a Grade Two air traffic service instructor (training organisation) certificate shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate certificate of competency as prescribed in Document SA-CATS 65, signed by a rating assessment examiner;
 - (ii) a certified true copy of the air traffic service licence held by the applicant;
 - (iii) the appropriate fee as prescribed in Part 187; and
 - (iv) original or certified proof of his or her age.

Issuing of Grade Two air traffic service instructor (training organisation) certificate

- **65.16.4** (1) The Director shall issue a Grade Two air traffic service instructor (training organisation) certificate if the applicant complies with the requirements referred to in regulation 65.16.1.
- (2) The certificate shall be issued in the appropriate prescribed form.

Privileges of Grade Two air traffic service instructor (training organisation) certificate

65.16.5 The holder of a Grade Two air traffic service instructor (training organisation) certificate shall be entitled to give academic or practical simulator instruction on any of the valid ratings which has been held by him or her.

Duration of certificate and renewal

65.16.6 A Grade Two air traffic service instructor (training organisation) certificate shall be issued or renewed for a period of 12 months calculated from the date on which the certificate was issued or from the date of expiry of the certificate if such certificate is renewed in accordance with the provisions of regulation 65.16.7.

Renewal of Grade Two air traffic service instructor (training organisation) certificate

- **65.16.7** (1) To renew a Grade Two air traffic service instructor (training organisation) certificate, the holder thereof shall within the 90 days immediately preceding the date of expiry of the certificate, have passed a proficiency check as prescribed in Document SA-CATS 65, conducted by a rating assessment examiner.
- (2) Subject to the provisions of sub-regulation (3), the rating assessment examiner referred to in sub-regulation (1) shall
 - (a) provide the Director with the appropriate certificate of competency as prescribed in Document SA-CATS 65; and
 - (b) sign the appropriate page of the licence of the holder of the certificate.
- (3) If the result of the proficiency check contemplated in sub-regulation (1) reveals that the holder of the certificate has failed to maintain the minimum standard required to exercise the privileges referred to in regulation 65.16.5, the rating assessment examiner shall
 - (a) report such result to the Director; and
 - (b) not sign the appropriate page of the licence of the holder of the certificate.

PART 66: AIRCRAFT MAINTENANCE ENGINEER LICENCE

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SUBPART 1: GENERAL

Applicability

66.01.1 This Part applies to -

- (a) the issuing of licences and ratings for South African AMEs, the privileges and limitations of such licences and ratings, and matters related thereto; and
- (b) the validation of foreign AME licences and ratings and the privileges and limitations of such validations.

Authority to act as aircraft maintenance engineer

- **66.01.2** (1) No person shall act as a maintenance engineer of an aircraft unless such person is the holder of a valid AME licence with the appropriate rating issued or validated by the Director in terms of this part.
- (2) The holder of an AME licence shall not exercise privileges other than the privileges granted by the licence and the appropriate rating held by such holder.

Classes of licences

66.01.3 The classes of AME licences are -

- (a) a Class I AME licence; and
- (b) a Class II AME licence.

Groups of airframes and engines

- **66.01.4** (1) For the purposes of licensing AMEs, airframes are classified into the following groups:
 - (a) Group 1 aeroplanes of wooden construction, with a MCM of 5 700 kilograms or less:
 - (b) Group 2 aeroplanes constructed of composites, with a MCM of 5 700 kilograms or less;

- (c) Group 3 aeroplanes of fabric-covered tubular-metal construction, with a MCM of 5 700 kilograms or less;
- (d) Group 4 unpressurised aeroplanes of all-metal construction, with a MCM of 5 700 kilograms or less;
- (e) Group 5 pressurised aeroplanes of all-metal construction, with a MCM of 5 700 kilograms or less;
- (f) Group 6 unpressurised aeroplanes of all-metal construction, with a MCM exceeding 5 700 kilograms;
- (g) Group 7 rotorcraft powered by reciprocating engines;
- (h) Group 8 pressurised aeroplanes of all-metal construction, with a MCM exceeding 5 700 kilograms;
- (i) Group 9 rotorcraft powered by turbine jet engines, with a MCM of 3175 kilograms or less;
- (j) Group 10 rotorcraft powered by turbine jet engines, with a MCM exceeding 3175 kilograms;
- (k) Group 11 aeroplanes constructed of composites, with a MCM exceeding 5 700 kilograms; and
- (I) Group 12 all other aircraft.
- (2) For the purposes of licensing AMEs, engines are classified into the following groups:
 - (a) Group 01 all horizontally opposed normally-aspirated piston engines;
 - (b) Group 02 all horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines:
 - (c) Group 03 all in-line piston engines;
 - (d) Group 04 all radial engines;
 - (e) Group 05 turbine jet engines; and
 - (f) Group 06 all other engines.

Categories of ratings

- 66.01.5 (1) The categories of ratings for a Class II AME licence are
 - (a) a Category A rating, for all types of -
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in regulation 66.01.4; or

- rotorcraft registered in the Republic, either singly or in the groups referred to in regulation 66.01.4;
- (b) a Category C rating, for all types of engines installed in
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in regulation 66.01.4; or
 - (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in regulation 66.01.4; and
- (c) a Category W rating, for any -
 - (i) avionic equipment;
 - (ii) electrical equipment;
 - (iii) instrument equipment; or
 - (iv) combination of such equipment,

installed in aircraft registered in the Republic.

- (2) The categories of ratings for a Class I AME licence are
 - (a) a Category B rating, for all types of
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in regulation 66.01.4; or
 - (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in regulation 66.01.4;
 - (b) a Category D rating, for all types of engines installed in
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in regulation 66.01.4; or
 - (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in regulation 66.01.4; and
 - (c) a Category X rating, for -
 - (i) the installation of compasses;
 - (ii) the installation of engine ignition equipment;
 - (iii) the installation of fixed and variable-pitch propellers;
 - (iv) the installation of instruments, including or excluding electrically operated instruments;
 - (v) the installation of electrical equipment;
 - (vi) the installation of automatic pilots; or

- (vii) the installation of avionic equipment, including or excluding equipment employing pulse techniques.
- (3) The categories of aircraft maintenance instructor ratings are
 - (a) a Grade One aircraft maintenance instructor rating; and
 - (b) a Grade Two aircraft maintenance instructor rating.
- (4) A Category C rating for a particular type of engine installed in a rotorcraft shall be granted only in conjunction with a Category A rating for the type of rotorcraft in which the engine is installed.

Competency

66.01.6 The holder of an AME licence with the appropriate rating shall not exercise the privileges granted by the licence and the appropriate rating unless such holder maintains competency by complying with the appropriate requirements prescribed in this Part together with Parts 43 and 145.

Consumption of alcohol and drugs

66.01.7 No AME shall –

- (a) consume any liquor less than 8 hours prior to the specified reporting time for duty;
- (b) commence a duty period while the concentration of alcohol in any specimen of blood taken from any part of his or her body is more than 0,02 gram per 100 millilitres;
- (c) consume alcohol during the duty period of whilst on standby for duty;
- (d) commence a duty period while under the influence of liquor or any drug having a narcotic effect.

Language

66.01.8 An AME shall have sufficient ability in reading, speaking and understanding the English language to enable them to adequately carry out the responsibilities of AMEs.

Validation of licence issued by appropriate authority

66.01.9 (1) The holder of an AME licence of a foreign country issued by an appropriate authority of a Contracting State, who desires to act as an AME on a South African registered aircraft, shall apply to the Director on the appropriate prescribed form, for the validation of such licence.

- (2) An application for a validation referred to in sub-regulation (1), shall be accompanied by
 - (a) the appropriate fee as prescribed in Part 187; and
 - (b) the licence to which the validation pertains.
- (3) An AME licence issued by an appropriate authority, may be validated by the Director subject to the same limitations which apply to the licence and in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 66.
- (4) An AME licence issued by an appropriate authority, shall be validated by the Director
 - (a) in the appropriate prescribed form;
 - (b) for a period of 12 months, calculated from the date of validation, or the period of validity of the licence, whichever period is the lesser period.
- (5) The Director may renew the validation of an AME licence issued by an appropriate authority in the circumstances and on the conditions as prescribed in Document SA-CATS 66.
- (6) The holder of a validated AME licence shall at all times comply with this Part and the requirements and conditions as prescribed in Document SA-CATS 66.

Register of licences

- **66.01.10** (1) The Director shall maintain a register of all AME licences issued, validated, renewed or reissued in terms of this Part.
- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the licence;
 - (b) the postal address of the holder of the licence;
 - (c) the date on which the licence was issued, validated, renewed or reissued;
 - (d) particulars of the ratings held by the holder of the licence; and
 - (e) the nationality of the holder of the licence.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence is issued, validated, renewed or reissued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Designation of examiners

- **66.01.11** (1) The Director may designate an examiner, in respect of the valid rating or ratings held by the examiner to
 - (a) issue to an applicant who meets the appropriate training and theoretical knowledge examination requirements prescribed in this part for the issuing or the renewal of a Class I or a Class II AME licence with a similar rating, a certificate;
 - (b) certify in the record of experience logbook of an applicant for the issuing or the renewal of a Class I or a Class II AME licence with a similar rating, that the applicant has complied with the appropriate experience requirements prescribed in this Part;
 - (c) issue to an applicant who meets the appropriate training and theoretical knowledge examination requirements prescribed in this part for the issuing or the renewal of a Grade One or a Grade Two aircraft maintenance instructor rating with a similar valid rating, a certificate; and
 - (d) certify in the record of experience logbook of an applicant for the issuing or the renewal of a Grade One or a Grade Two aircraft maintenance instructor rating with a similar valid rating, that the applicant has complied with the appropriate experience requirements prescribed in this part.
- (2) The privileges referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 66.
- (3) The Director shall sign and issue to each designated examiner a document which shall state the full name of such examiner and contain a statement that
 - (a) such examiner has been designated in terms of sub-regulation (1); and
 - (b) such examiner is empowered to exercise the privileges referred to in subregulation (1).
- (4) The application to be considered for designation as referred to in sub-regulation (1) shall be accompanied by
 - (a) detail of the licence and ratings to which the application applies; and
 - (b) the appropriate fee as prescribed in Part 187.

Training

66.01.12 Training as required by this Part shall only be provided by the holder of an ATO approval issued in terms of Part 141.

Logbooks

- **66.01.13** (1) Any person presenting or undertaking training under any aircraft trade or a holder of an AME licence shall maintain a logbook and shall record therein all work carried out on an aircraft and its components.
- (2) The form of and information to be contained in a logbook referred to in sub-regulation (1), and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 66.
- (3) No alterations of a logbook shall be made once it is signed off by a designated person.

SUBPART 2: AIRCRAFT MAINTENANCE ENGINEER LICENCE AND RATING

Requirements for licence and rating

- **66.02.1** An applicant for the issuing of an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, or an amendment thereof, shall
 - (a) be a South African citizen or in possession of a valid permanent residence permit or valid temporary work permit with a letter of employment and be employed by a South African approved AMO;
 - (b) be not less than 21 years of age;
 - (c) have successfully completed the training referred to in regulation 66.02.2;
 - (d) have passed the theoretical knowledge examination referred to in regulation 66.02.3; and
 - (e) have acquired the experience referred to in regulation 66.02.4.

Training

66.02.2 An applicant for the issuing of an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, shall have successfully completed the appropriate training as prescribed in Document SA-CATS 66.

Theoretical knowledge examination

- **66.02.3** (1) An applicant for the issuing of a Class II aircraft maintenance engineer licence with a Category A rating, shall have passed
 - (a) for aeroplanes and helicopters with a MCM in excess of 5 700 kg and 3 175 kg respectively, an approved type training course by an organization approved by the appropriate authority in the country where the training organization is located or training provided by an approved original equipment manufacturer or designated training facility; or

- (b) for aeroplanes and helicopters with a MCM of 5 700 kg and 3 175 kg respectively or below,
 - (i) an approved type training course prescribed in Part 141; or
 - (ii) an approved manufacturers course or the appropriate written examination as prescribed in Document SA-CATS 66; and
- (c) an approved Civil Aviation Regulations course as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66; and
- (d) an approved airframe general (Cat A) course as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66; and
- (e) an approved human factors course with the appropriate written examination as prescribed in Document SA-CATS 66.
- (2) An applicant for the issuing of a Class II AME licence with a Category C rating, shall have passed
 - (a) an approved type course as prescribed in Part 141, or approved manufacturers course or the appropriate written examination as prescribed in Document SA-CATS 66;
 - (b) an approved Civil Aviation Regulations course as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66;
 - (c) an approved piston engine general (Cat C) or gas turbine general (Cat C) course respectively for the appropriate type as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66; and
 - (d) an approved human factors course with the appropriate written examination as prescribed in Document SA-CATS 66.
- (3) An applicant for the issuing of a Class II AME licence with a Category W rating, shall have passed
 - (a) the approved course applicable to the rating applied for, which may be:
 - (i) instruments equipment course (Cat W); or
 - (ii) electrical equipment course (Cat W); or
 - (iii) avionic equipment course (Cat W),

as prescribed in Part 141 or the appropriate written examinations as prescribed in Document SA-CATS 66;

- (b) an approved Civil Aviation Regulations course or the appropriate written examination as prescribed in Document SA-CATS 66; and
- (c) an approved human factors course with the appropriate written examination as prescribed in Document SA-CATS 66.

- (4) An applicant for the issuing of a Class I aircraft maintenance engineer licence with a Category B rating, shall have passed
 - (a) for aeroplanes and helicopters with a MCM in excess of 5 700 kg and 3 175 kg respectively, an approved type training course by an organization approved by the appropriate authority in the country where the training organization is located or training provided by an approved original equipment manufacturer or designated training facility; or
 - (b) for aeroplanes and helicopters with a MCM of 5 700 kg and 3 175 kg respectively or below,
 - (i) an approved type training course prescribed in Part 141; or
 - (ii) an approved manufacturers course or the appropriate written examination as prescribed in Document SA-CATS 66; and
 - (c) an approved Civil Aviation Regulations course or the appropriate written examination as prescribed in Document SA-CATS 66; and
 - (d) an approved airframe general (Cat B) course as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66; and
 - (e) an approved human factors course with the appropriate written examination as prescribed in Document SA-CATS 66.
- (5) An applicant for the issuing of a Class I aircraft maintenance engineer licence with a Category D rating, shall have passed
 - (a) the approved type course as prescribed in Part 141 or approved manufacturers course or the appropriate written examination as prescribed in Document SA-CATS 66 covering the Class I or Class II product to a minimum level (overhaul) needed for a Category D rating;
 - (b) an approved Civil Aviation Regulations course or the appropriate written examination as prescribed in Document SA-CATS 66; and
 - (c) an approved piston engine general (Cat D) or gas turbine general (Cat D) course respectively per type applying for as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66; and
 - (d) an approved human factors course with the appropriate written examination as prescribed in Document SA-CATS 66.
- (6) An applicant for the issuing of a Class I aircraft maintenance engineer licence with a Category X rating, shall have passed
 - (a) the applicable approved course, per rating applying for, which may be:
 - (i) Instrument Equipment Course (Cat X);
 - (ii) Electrical Equipment Course (Cat X);
 - (iii) Avionic Equipment Course (Cat X);
 - (iv) Ignition Equipment Course (Cat X);

- (v) Compass Systems Course (Cat X);
- (vi) Auto Pilot General Course (Cat X); or
- (vii) Type course on fixed and variable-pitch propellers (Overhaul Level) (Cat X);

as prescribed in Part 141 or approved manufacturers course on the particular type (overhaul level) or the appropriate written examinations as prescribed in Document SA-CATS 66; and

- (b) an approved Civil Aviation Regulations course as prescribed in Part 141 or the appropriate written examination as prescribed in Document SA-CATS 66; and
- (c) an approved human factors course with the appropriate written examination as prescribed in Document SA-CATS 66.
- (7) The applicant shall provide the Director with certified proof of successful completion of approved training.
- (8) The approved training certificates shall remain valid, provided the holder thereof remains active in aircraft maintenance.

Experience

66.02.4 An applicant for the issuing of an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5 shall comply with the requirements for the appropriate experience as prescribed in Document SA-CATS 66.

Application for licence or amendment thereof

- **66.02.5** (1) An application for the issuing of an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) original or certified proof of
 - (aa) the identity of the applicant;
 - (bb) the age of the applicant; and
 - (cc) the servicing and overhaul experience record of the applicant;
 - (ii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 66.02.3;
 - (iii) two recent passport size photographs of the applicant; and

- (iv) the appropriate fee as prescribed in Part 187.
- (2) An application for the amendment of an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) a certified true copy of the licence held by the applicant;
 - (ii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 66.02.3;
 - (iii) original or certified proof of the servicing and overhaul experience record of the applicant in respect of the type of aeroplane or rotorcraft for which application is being made; and
 - (iv) the appropriate fee as prescribed in Part 187.
- (3) Application for a special approval of a first-of issue or addition of a licence with a rating on newly registered aircraft shall be made in accordance with regulation 11.04.1 and accompanied by a letter from the company nominating the member to be given the rating, who has done the manufacture's course approved by the factory together with the appropriate authority.

Issuing of licence

- **66.02.6** (1) The Director shall issue an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, if the applicant complies with the requirements referred to in regulation 66.01.6.
- (2) The licence shall be issued on the appropriate prescribed form.
- (3) The rating shall specify the type of aeroplane, rotorcraft, engine, equipment, instruments, welding processes, as the case may be, in respect of which the holder of such rating is entitled to exercise the privileges thereof.
- (4) Upon the issuing of a licence the holder thereof shall forthwith affix his or her signature in ink in the space on the licence provided for such purpose.

Period of validity

- **66.02.7** (1) An AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, shall be valid for a period of 24 months calculated from the date on which the licence is issued or from the date of expiry of the licence if such licence is renewed in accordance with the provisions of regulation 66.02.9.
- (2) Any amendment of a licence shall be valid for the period for which the licence is valid.

Renewal of AME licence

- **66.02.8** (1) To renew an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, the holder thereof shall, within the 24 months preceding the date of expiry of the licence, have exercised the privileges of the licence for not less than six months
 - (a) as a licensed AME on the relevant rating;
 - (b) having supervised the maintenance of aircraft relevant to the ratings held in an executive capacity; or
 - (c) having performed a technical training function relevant to the ratings held in a certificated training organisation.
- (2) An application for the renewal of the licence shall, within 90 days immediately preceding the date of expiry of such licence, be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) a certified true copy of the licence held by the applicant;
 - (ii) the appropriate fee as prescribed in Part 187; and
 - (iii) original or certified proof of compliance with the provisions of sub-regulation (1).
- (3) The Director shall renew the licence if the applicant complies with the requirements referred to in sub-regulations (1) and (2).
- (4) The licence shall be renewed in the appropriate prescribed form.

Reissue of AME licence

- **66.02.9** (1) The holder of an AME licence referred to in regulation 66.01.3 with a rating referred to in regulation 66.01.5, which has expired due to the lapse of the period referred to in regulation 66.02.7, may apply to the Director in the appropriate prescribed form for the reissuing of the expired licence.
- (2) Upon application for the re-issuing of the expired licence as prescribed in sub-regulation (1), the Director shall re-issue such licence if the applicant complies with the requirements referred to in regulation 66.02.1.
- (3) If a period of less than two years has expired since the lapse of an AME licence, the applicant shall, in addition to the requirements prescribed in regulation 66.02.1, provide proof of experience of at least six months immediately prior to the application for the reissue.
- (4) If a period of more than two years but less than five years has expired since the lapse of a an AME licence, the applicant shall, in addition to the requirements prescribed in regulation 66.02.1, write the examinations prescribed in regulation 66.02.3(1)(c) and provide proof of experience of at least six months immediately prior to the application for the reissue.
- (5) If an applicant has not worked in a maintenance or servicing facility within the aviation environment for a period of five years or more since the expiry of his or her licence, then the

applicant shall comply with the requirements for the initial issue of such licence as prescribed in regulation 66.02.1 and in addition rewrite examinations of all the general courses applicable to the ratings previously held.

(6) The provisions of regulation 66.02.5 shall apply with the necessary changes to an application referred to in sub-regulation (1).

Privileges of aircraft maintenance engineer or rating

66.02.10 (1) The holder of a valid Class II AME licence with a Category A rating, shall be entitled to –

- (a) certify, in accordance with the regulations in Part 43, the release to service of the specified type of aeroplane or rotorcraft, excluding its engine or engines; and
- (b) certify, in the logbook -
 - (i) work which the maintenance schedule relating to the specified type of aeroplane or rotorcraft authorises such holder to certify; and
 - (ii) any adjustment, minor repair or minor modification of the specified type of aeroplane or rotorcraft, including the installation or replacement of equipment, instruments and minor components of such aeroplane or rotorcraft, excluding its engine or engines.
- (2) The holder of a valid Class II AME licence with a Category C rating, shall be entitled to
 - (a) certify, in accordance with the regulations in Part 43, the release to service of the specified type of engine or engines; and
 - (b) certify, in the logbook -
 - (i) work which the maintenance schedule relating to the specified type of engine or engines authorises such holder to certify;
 - (ii) the installation of the specified type of engine or engines in an aircraft;
 - (iii) the installation and maintenance, other than the overhaul, major modification or major repair, of propellers and the reassembly of variable-pitch propellers which may have been dismantled for transport purposes; and
 - (iv) any adjustment or minor modification of the specified type of engine or engines and the replacement of external components and piston and cylinder assemblies, if such replacement does not involve dismantling the engine or engines for purposes other than to obtain access to the components and assemblies.
- (3) The holder of a valid Class II AME licence with a Category W rating, shall be entitled to –

- (a) certify, in accordance with the regulations in Part 43, the release to service of the specified type of equipment; and
- (b) certify, in the logbook -
 - (i) work which the maintenance schedule relating to the specified type of equipment authorises such holder to certify;
 - (ii) any adjustment, maintenance or modification of such equipment; and
 - (iii) any installation of such equipment in aircraft and the replacement of components and parts of such equipment: Provided that no equipment shall be dismantled for the purpose of making internal replacements.
- (4) The holder of a valid Class I AME licence with a Category B rating, shall be entitled to certify, in the logbook
 - (a) the overhaul, repair or modification, including trimming, welding, spray painting, electroplating or machining, of the specified type of aeroplane or rotorcraft, excluding its engine or engines, except –
 - (i) the overhaul, repair or modification of such item, equipment or apparatus which is to be certified by the holder of a Category X rating; and
 - (ii) the installation and testing of such instrument, electrical equipment or radio apparatus which is to be certified by the holder of a Category W rating;
 - (b) subject to the provisions of regulation 43.02.11, the non-destructive testing of structures, composites, components and parts;
 - (c) the overhaul of pneumatic and fuel components; and
 - (d) the manufacturing or replacement of structures, composites, components and parts, if the manufacturing or replacement of the structures, composites, components and parts is necessary for such holder to complete an overhaul, repair or modification which he or she will certify.
- (5) The holder of a valid Class I AME licence with a Category D rating, shall be entitled to certify, in the logbook
 - (a) the overhaul, repair or modification of the specified type of engine or engines, except the overhaul, repair or modification of the ignition equipment, other than the spark plugs, and of the propeller, starter and generator, which is to be certified by the holder of a Category X rating: Provided that the replacement of mechanical parts of a magneto may be certified; and

- (b) the manufacturing or replacement of components and parts, if the manufacturing or replacement of the components and parts is necessary for such holder to complete an overhaul, repair or modification which he or she will certify.
- (6) The holder of a valid Class I AME licence with a Category X rating, shall be entitled to certify, in the logbook
 - (a) the installation and compensation of the specified compasses;
 - (b) the installation, overhaul, repair or modification of the specified engine ignition equipment, and replacements thereof;
 - (c) the installation, overhaul, repair or modification of fixed and variable-pitch propellers, and replacements thereof;
 - (d) the installation, overhaul, repair or modification of the specified instruments;
 - (e) the installation, overhaul, repair or modification of the specified electrical equipment, and replacements thereof;
 - (f) the installation, overhaul, repair or modification of automatic pilots other than automatic pilots which operate on electronic principles;
 - (g) the installation and in-flight adjustment of electronic automatic pilots;
 - (h) the installation, overhaul, repair or modification of the specified avionic equipment, and replacements thereof; and
 - (i) the carrying out of the specified welding processes.

SUBPART 3: GRADE ONE AND GRADE TWO AIRCRAFT MAINTENANCE INSTRUCTOR RATINGS

Requirements for grade one or grade two aircraft maintenance instructor rating

66.03.1 An applicant for the issuing of a Grade One or Grade Two aircraft maintenance instructor rating shall –

- (a) be not less than 21 years of age;
- (b) hold a valid AME licence;
- (c) hold at least one valid rating; Provided that, where the applicant is the holder of a Category B or D rating for a particular type of an aircraft or engine, he or she shall also be the holder of a Category A or C rating, as applicable, for that type of aircraft or engine;
- (d) have successfully completed the training referred to in regulation 66.03.2;
- (e) have passed the theoretical knowledge examination referred to in regulation 66.03.3; and
- (f) have acquired the experience referred to in regulation 66.03.4.

Training

66.03.2 An applicant for the issuing of a Grade One or Grade Two aircraft maintenance instructor rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 66.

Theoretical knowledge examination

- **66.03.3** (1) An applicant for the issuing of a Grade One or Grade Two aircraft maintenance instructor rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 66.
- (2) An applicant who fails the written examination referred to in sub-regulation (1), may apply for retesting after the appropriate period specified in Document SA-CATS 66.

Experience

66.03.4 An applicant for the issuing of a Grade One or Grade Two aircraft maintenance instructor rating shall comply with the requirements for the appropriate experience as prescribed in Document SA-CATS 66.

Application for instructor rating

- **66.03.5** (1) An application for the issuing of a Grade One or Grade Two aircraft maintenance instructor rating shall be made to the Director in the appropriate prescribed form.
- (2) The application referred to in sub-regulation (1) shall be accompanied by
 - (a) in the case of Grade One AME instructor rating
 - (i) original or certified proof of
 - (aa) the identity document of the applicant;
 - (bb) compliance with the requirements referred to in regulation 66.03.1(d), (e) and (f); and
 - (cc) the applicant's competency to exercise the privileges referred to in regulation 66.03.8;
 - (ii) a certified true copy of the AME licence held by the applicant; and
 - (iii) the appropriate fee as prescribed in Part 187;
 - (b) in the case of Grade Two AME instructor rating
 - (i) original or certified proof of –

- (aa) the identity document of the applicant;
- (bb) the servicing and overhaul experience record of the applicant;
- (ii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 66.03.3;
- (iii) a certified true copy of the AME licence held by the applicant; and
- (iv) the appropriate fee as prescribed in Part 187.

Issuing of instructor rating

66.03.6 (1) The Director shall issue a –

- (a) Grade One aircraft maintenance instructor rating if
 - (i) the applicant complies with the requirements referred to in regulation 66.03.1; and
 - (ii) the Director is satisfied that the applicant is competent to exercise the privileges referred to in regulation 66.03.8.
- (b) Grade Two aircraft maintenance instructor rating if the applicant complies with the requirements referred to in regulation 66.03.1.
- (2) The instructor rating shall be issued on the appropriate prescribed form.

Period of validity

66.03.7 A Grade One or Two aircraft maintenance instructor rating shall be valid for the period for which the AME licence is valid.

Privileges of instructor rating

- **66.03.8** (1)The holder of a Grade One aircraft maintenance instructor rating shall be entitled to
 - (a) give academic or practical instruction on any of the valid ratings held by him or her; and
 - (b) act as an examiner in any of the valid ratings held by him or her, if designated by the Director in terms of regulation 66.01.11.
- (2) The holder of a Grade Two aircraft maintenance instructor rating shall be entitled to give academic or practical instruction on any of the valid ratings held by him or her.

Renewal of instructor rating

- **66.03.9** (1) To renew a Grade One or Grade Two aircraft maintenance instructor rating, the holder thereof shall, within the 24 months preceding the date of expiry of the rating, have served for not less than six months as an aircraft maintenance instructor.
- (2) An application for the renewal of the rating shall, within 90 days immediately preceding the date of expiry of such rating, be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) in the case of Grade One AME instructor rating
 - (aa) certified true copy of the AME licence held by the applicant;
 - (bb) the appropriate fee as prescribed in Part 187; and
 - (cc) original or certified proof of compliance with the provisions of subregulation (1) and the applicant's competency to exercise the privileges referred to in regulation 66.03.8;
 - (ii) in the case of Grade Two AME instructor rating
 - (aa) a certified true copy of the AME licence held by the applicant;
 - (bb) the appropriate fee as prescribed in Part 187; and
 - (cc) original or certified proof of compliance with the provisions of subregulation (1).
- (3) The Director shall renew the rating if the applicant complies with the requirements referred to in sub-regulations (1) and (2).
- (4) The rating shall be renewed in the appropriate prescribed form.
- (5) The renewal of the rating shall be valid for the period for which the AME licence is valid.

SUBPART 4: APPROVED PERSON CERTIFICATE

Applicability

66.04.1 This subpart applies to the issuing of approvals to natural persons, other than licensed AMEs, licensed pilots and persons authorised by the holder of an AMO approval, to carry out maintenance on South African registered non-type certificated aircraft, their engines, components and equipment.

Authority to act as approved person

- **66.04.2** (1) No person shall act as an approved person on non-type certificated aircraft referred to in sub-regulation (3), unless such person is the holder of a valid approved person certificate with the appropriate rating issued by the Director or, if applicable, the organisation designated in terms of Part 149, as the case may be.
- (2) The holder of an approved person certificate shall not exercise privileges other than those granted by the approval and the appropriate rating held by such holder.

Categories of aircraft

- **66.04.3** An approved person certificate may be issued in respect of any of the following categories of non-type certificated aircraft
 - (a) aeroplanes, including microlight aeroplanes;
 - (b) helicopters;
 - (c) gyroplanes;
 - (d) gliders, including power assisted and touring gliders;
 - (e) manned captive and manned free balloons.

Categories and classes of ratings

- **66.04.4** (1) The categories of ratings for an approved person certificate are
 - (a) inspection rating; and
 - (b) repair rating.
- (2) The ratings referred to in sub-regulation (1) may be issued in one or more of the following classes:
 - (a) Airframes, for the airframes of any of the categories of non-type certificated aircraft registered in the Republic referred to in regulation 66.04.3, as listed in Document SA-CATS 66. The approved person certificate shall indicate the particular category, class and type or group of types of aircraft airframes for which the holder of the certificate holds authorisation A.
 - (b) Engines, for the engines listed in the Document SA-CATS 66, installed in non-type certificated aircraft registered in the Republic. The approved person certificate shall indicate the particular type or types of engines for which the holder of the certificate holds authorisation.
 - (c) Equipment, for
 - (i) avionics equipment;
 - (ii) electrical equipment;
 - (iii) instrument equipment;
 - (iv) combination of such equipment.

- (d) Welding.
- (3) With regard to paragraph (c), the approved person certificate shall indicate the particular type of avionics, electrical, instrument or a combination of such equipment for which the holder of the certificate holds authorisation.

Competency

66.04.5 The holder of an approved person certificate shall not exercise the privileges granted by the approval and rating unless such holder maintains competency by complying with the appropriate requirements prescribed in this Part.

Consumption of alcohol and drugs

66.04.6 No approved person shall –

- (a) carry out any maintenance on an aircraft, its components or equipment while the concentration of alcohol in any specimen of blood taken from any part of his or her body is more than 0.02 gram per 100 millilitres, or when under the influence of any drug having a narcotic effect; or
- (b) consume alcohol or take any drug having a narcotic effect whilst carrying out maintenance on an aircraft, its components or equipment.

Language

66.04.7 An approved person shall have sufficient ability in reading, speaking and understanding the English language to enable him or her to adequately carry out his or her responsibilities as an approved person.

Requirements for approval and rating

- **66.04.8** An applicant for the issuing of an approved person certificate with the appropriate category and rating shall
 - (a) be not less than 18 years of age;
 - (b) have successfully passed the theoretical knowledge examination referred to in regulation 66.04.9; and
 - (c) have acquired the experience referred to in regulation 66.04.10.

Theoretical knowledge examination

- **66.04.9** (1) An applicant for the issuing of an approved person certificate shall have successfully passed the written examination prescribed in Document SA-CATS 66.
- (2) A candidate who fails the written examinations referred to in sub-regulation (1), may within 30 days from the date of notification of the examination results apply in writing for a remark.
- (3) The application shall be made on the appropriate form and be accompanied by the appropriate fee prescribed in Part 187.

- (4) If the remark is successful, the fee will be refunded.
- (5) An applicant, who fails the written examinations referred to in sub-regulation (1), may apply for re-testing after the appropriate period specified in Document SA-CATS 66.

Experience

66.04.10 An applicant for the issuing of an approved person certificate shall either –

- (a) be the primary builder of, and have obtained an authority to fly for his or her own aircraft; or
- (b) have obtained proven aircraft maintenance experience, compatible with the particular rating.

Application for approval or amendment

66.04.11 An application for the issuing of an approved person certificate or for an amendment thereof, shall –

- (a) be made on the appropriate form as prescribed by the Director; and
- (b) be accompanied by -
 - (i) original or certified proof of
 - (aa) the identity of the applicant;
 - (bb) the age of the applicant;
 - (cc) the maintenance experience of the applicant; and
 - (dd) if applicable: the build number, issued in terms of regulation 24.01.2(4)(c), and the authority to fly, issued in terms of Subpart 2 of Part 24.
 - (ii) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 66.04.9;
 - (iii) two recent passport-size photographs of the applicant; and
 - (iv) the appropriate fee as prescribed in Part 187.

Issuing of approval certificate

- **66.04.12** (1) The Director or if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue an approved person certificate with the appropriate rating if the applicant complies with the requirements referred to in regulation 66.04.11.
- (2) The certificate shall be issued on the appropriate prescribed form.
- (3) The certificate shall specify the categories of aircraft, categories and classes of ratings, and where applicable the type by name of non-type certificated aircraft, its components or equipment in respect of which the holder of such certificate is entitled to exercise the privileges thereof.

(4) Upon receipt of the approved person certificate, the holder shall forthwith affix his or her signature in ink in the space on the certificate provided for such purpose.

Period of validity

- **66.04.13** (1) An approved person certificate issued in accordance with this Subpart shall be valid for a period of 24 months, calculated from the date on which the approval is issued or from the date of renewal of the approval if such approval is renewed in accordance with the provisions of regulation 66.04.14.
- (2) Any amendment of an approval person certificate shall be valid for the period for which the certificate is valid.

Renewal of approved person certificate

- **66.04.14** (1) To renew an approved person certificate, the holder thereof shall
 - (a) within the 24 months preceding the date of expiry of the certificate, have carried out an inspection or maintenance on at least two aircraft or engines that the holder is rated on:
 - (b) within 30 days immediately preceding the date of expiry of such certificate, submit an application for renewal accompanied by
 - (i) a certified true copy of the certificate held by the applicant;
 - (ii) original or certified proof of compliance with the provisions of sub-regulation (1)(a).
- (2) The application for the renewal of the certificate shall be made on the prescribed form .
- (3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall renew the certificate if the applicant complies with the requirements referred to in sub-regulation (1).
- (4) The certificate shall be renewed on the appropriate prescribed form.

Reissue

- **66.04.15** (1) The holder of an approved person certificate that has expired due to the lapse of the period referred to in regulation 66.04.13 may apply to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, for the reissue of the expired certificate.
- (2) Upon application for the re-issue of the expired certificate, the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, shall reissue such certificate if the applicant complies with the requirements prescribed in regulation 66.04.8.
- (3) The provisions of regulations 66.04.11 and 66.04.12 shall apply with the necessary changes to an application referred to in sub-regulation (1).

Privileges and limitations

- **66.04.16** (1) Subject to the provisions of regulations 66.04.5 and 66.04.6, the holder of an approved person certificate shall be entitled
 - (a) if he or she is the holder of inspection rating
 - (i) to exercise in respect of a non-type certificated aircraft, the privileges of an authorised officer, inspector or authorised person provided for in regulations 24.01.8 and 24.01.9 in Part 24 of these regulations; and
 - (ii) to carry out inspections on a non-type certificated aircraft in accordance with the requirements prescribed in Part 24 as may be called for from time to time by the constructor or owner of the non-type certificated aircraft;
 - (b) if he or she is the holder of the repair rating
 - (i) to carry out, in accordance with the requirements prescribed in Part 24, such maintenance, excluding the inspections referred to in subparagraph (a)(ii), on a non-type certificated aircraft, its components and equipment as may be called for from time to time by the constructor or owner of the non-type certificated owner;
 - (ii) certify in the aircraft logbook/s
 - (aa) all maintenance carried out on the aircraft; and
 - (bb) all modifications incorporated on the aircraft; and
 - (iii) certify, in accordance with the regulations in Part 24, the release to service of the non-type certificated aircraft.
- (2) The holder of an approved person certificate is not authorised to grant permission to the constructor to fly his or her aircraft for the purposes of carrying out proving test flights unless he or she is the holder of the appropriate flight test rating.
- (3) Any inspection carried out on a non-type certificated aircraft in terms of regulation 24.01.8 shall be of a conditional nature in that the approved person carrying out the inspection shall not be required to guarantee the airworthiness of the aircraft.
- (4) Whenever an authorised person issues a release of service for a non-type certificated aircraft he or she thereby certifies that he or she is satisfied that the aircraft and all its equipment are in every way serviceable for flight and that all maintenance has been carried out in accordance with the regulations and with the aircraft's approved maintenance schedule.
- (5) The holder of an authorised person certificate who wishes to carry out welding on a non-type certificated aircraft shall be the holder, of have been the holder of any kind of welding certificate.

Register of approved persons

- **66.04.17** (1) The Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all approved person certificates issued, renewed or reissued in terms of this Part.
- (2) The register shall contain the following particulars –

- (a) the full name of the holder of the certificate;
- (b) the postal address of the holder of the certificate;
- (c) the date on which the certificate was issued, renewed or reissued;
- (d) particulars of the ratings held by the certificate holder; and
- (e) the nationality of the holder of the certificate.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the certificate is issued, renewed or reissued.
- (4) The register shall be kept at a safe place at the office of the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be.

Responsibilities of certificate holder

- **66.04.18** (1) The holder of an approved person certificate shall maintain a logbook up to date in which he or she shall record details of all inspections and maintenance carried out.
- (2) The format of the logbook and the manner in which it will be kept are as prescribed in Part 43.

PART 67: MEDICAL CERTIFICATION

List of regulations

67.00.1	Applicability
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Applicability

67.00.1 (1) This Part applies to the issuing of medical certificates for flight crew, cabin crew and air traffic service personnel.

- (2) The Director may designate medical officers to perform in terms of this Part any functions or duties on his or her behalf.
- (3) Where appropriate, the reference to the Director in this Part shall be deemed to include medical officers referred to in sub-regulation (2).

Classes of medical certificates

67.00.2 (1) The classes of medical certificates are –

- (a) Class 1 -
 - (i) airline transport pilot: aeroplane and helicopter;
 - (ii) commercial pilot: aeroplane and helicopter;
 - (iii) flight test rating;
 - (iv) commercial microlight aeroplane pilot;
 - (v) gyroplane pilot for commercial purposes;
 - (vi) commercial glider pilot;
 - (vii) airship pilot for commercial purposes;
 - (viii) flight engineer; and
 - (ix) powered paraglider pilot for commercial purposes;
- (b) Class 2
 - (i) private pilot: aeroplane and helicopter;
 - (ii) student pilot;
 - (iii) cabin crew member; and
 - (iv) free balloon pilot for commercial purposes.
- (c) Class 3
 - (i) air traffic controller; and
- (d) Class 4 -
 - (i) microlight aeroplane pilot;
 - (ii) glider pilot;
 - (iii) gyroplane pilot for non-commercial purposes;
 - (iv) airship pilot for non-commercial purposes;
 - (v) free balloon pilot for non-commercial purposes;
 - (vi) hang-glider pilot;
 - (viii) paraglider pilot;
 - (viii) powered paraglider pilot for non-commercial purposes; and
 - (ix) air traffic service assistant.
- (2) A flight crew member who holds a valid Class 1 medical certificate shall be deemed to hold a valid Class 2 medical certificate and a valid Class 4 medical certificate

- (3) An air traffic service personnel member who holds a valid Class 3 medical certificate shall be deemed to hold a valid Class 4 medical certificate.
- (4) Upon expiry of a Class 1 medical certificate, such medical certificate shall be deemed to be valid for the remainder of the period for which it would have been valid as a Class 2 medical certificate and a Class 4 medical certificate as specified in regulation 67.00.6.
- (5) Upon expiry of a Class 3 medical certificate such medical certificate shall be deemed to be valid for the remainder of the period for which it would have been valid as a Class 4 medical certificate as specified in regulation 67.00.6.
- (6) The medical requirements and standards to be complied with by an applicant for, or the holder of, a Class 1, 2, 3 or 4 medical certificate are as prescribed in Document SA-CATS 67.

Functions of Director regarding medical examinations

67.00.3 (1) The Director must –

- (a) exercise control over medical examinations or tests and over aviation medical examiners performing such examinations or tests;
- (b) determine standards for such examinations or tests and for the training of such aviation medical examiners;
- (c) issue or amend medical certificates and keep all books or documents regarding such examinations or tests;
- (d) apply basic safety management principles to the medical assessment process of licence holders by *inter alia*:
 - (i) routinely collecting and analysing medical findings during medical assessments to identify areas of increased medical risk;
 - (ii) continuously re-evaluating the medical assessment process to concentrate on identified areas of increased medical risk;
 - (iii) routinely collecting and analysing incapacitation in-flight and on active duty; and
 - (iv) ensuring that accredited medical conclusions are reached.
- (2) The Director may designate a body or institution to
 - (a) exercise control over medical examinations or tests and over aviation medical examiners performing such examinations or tests;
 - (b) determine standards for such examinations or tests and for the training of such aviation medical examiners:
 - (c) issue or amend medical certificates and keep all books or documents regarding such examinations or tests; and
 - (d) subject to the provisions of regulation 67.00.9, advise the Director on any matter connected with such examinations, tests or aviation medical examiners and on the training of flight crew and cabin crew in first aid.
- (3) The designation referred to in sub-regulation (2) shall be made in writing and shall be published in the Gazette within 30 days from the date of such designation.

- (4) The powers and duties referred to in sub-regulation (2) shall be exercised and performed according to the conditions, rules, requirements, procedures and standards prescribed in Document SA-CATS 67.
- (5) The designated body or institution shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the effective performance of the designated functions in terms of regulation 67.00.3 (2).

Designation of aviation medical examiners

- **67.00.4** (1) The Director may, after consultation with the designated body or institution, designate aviation medical examiners to perform medical examinations or tests required for the issuing of medical certificates.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 67.
- (3) The Director shall sign and issue to each DAME a document which shall state the full name of such aviation medical examiner and contain a statement that
 - (a) such aviation medical examiner has been designated in terms of sub-regulation (1); and
 - (b) such aviation medical examiner is empowered to
 - (i) perform the medical examination or test required for the issuing of the appropriate medical certificate;
 - (ii) subject to the provisions of regulation 67.00.8, issue such medical certificate; or
 - (iii) defer the issuing of such medical certificate pending an appropriate instruction from the designated body or institution.

Class 4 medical certificates

- **67.00.5** (1) Notwithstanding the provisions of regulation 67.00.4, any medical practitioner who is registered in terms of Section 17 of the Medical, Dental and Supplementary Health Service Professions Act, 1998 (Act No. 1 of 1998), may perform a medical examination for the purpose of the issuing of a Class 4 medical certificate.
- (2) The provisions of regulations 67.00.7(1) and (2) applies with the necessary changes to an application for the issuing of a Class 4 medical certificate.
- (3) The medical practitioner concerned shall, within 60 days from the date on which the medical examination has been performed, submit the application together with any appropriate
 - (a) supporting medical reports; and

- (b) results of medical examinations or tests performed; to the designated body or institution for the verification of the application and the issuing of the medical certificate.
- (4) An applicant who complies with the appropriate medical requirements and standard referred to in regulation 67.00.2(6), shall be entitled to a medical certificate.
- (5) On receipt of the documents referred to in sub-regulation (3), the designated body or institution shall
 - (a) verify the application concerned; and
 - (b) if the applicant complies with the appropriate medical requirements and standards referred to in sub-regulation 67.00.2(6), issue the medical certificate.
- (6) The designated body or institution may, if a medical conclusion requires that
 - (a) medical examinations or tests be performed at shorter intervals; or
 - (b) additional examinations or tests be performed, endorse the medial certificate with such requirement or limitation.

Period of validity of medical certificates

- **67.00.6** (1) A Class 1 medical certificate shall, subject to sub-regulation (5) be issued for a period of
 - (a) twelve (12) calendar months, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is less than 40 years of age on the date on which the medical certificate is issued;
 - (b) six (6) calendar months in the case of an airline transport pilot (aeroplane or helicopter), engaged in single-crew commercial air transport operations, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is 40 years of age or more on the date on which the medical certificate is issued;
 - (c) twelve (12) calendar months in the case of an airline transport pilot (aeroplane or helicopter), engaged in multi-crew commercial air transport operations, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is 40 years of age or more, but less than 60 years of age, on the date on which the medical certificate is issued;
 - (d) twelve (12) calendar months in the case of a commercial pilot (aeroplane or helicopter), calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is 40 years of age or more, but less than 60 years of age, on the date on which the medical certificate is issued;
 - (e) six (6) calendar months in the case of a pilot as specified in subparagraph (c) and (d), where the applicant is 60 years of age or more.

- (2) A Class 1 medical certificate referred to in sub-regulations (1)(c) and (d) shall be valid subject to the condition that the holder
 - (a) submits a six (6) monthly medical report, if he or she has a medical disease or risk factor for which he or she receives regular treatment by his or her treating physician or DAME, and the report shall include:
 - (i) nature of disease or risk factor;
 - (ii) information regarding control of risk factors or disease;
 - (iii) complications that have developed as a result of the disease or risk factor; and
 - (iv) type of treatment and side-effects of treatment.
 - (b) submits an annual follow-up blood test where applicable; and
 - (c) adheres to the requirements of any Schedule or Protocol as detailed in Document SA-CATS 67, where applicable.
- (3) A Class 2 and 3 medical certificate shall, subject to sub-regulation (5) be issued for a period of
 - (a) twenty four (24) calendar months, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is less than 40 years of age on the date on which the medical certificate is issued; and
 - (b) twelve (12) calendar months, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is 40 years of age or more on the date on which the medical certificate is issued.
- (4) A Class 4 medical certificate shall, subject to sub-regulation (5), be issued for a period not exceeding
 - (a) sixty (60) calendar months, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is less than 40 years of age on the date on which the medical certificate is issued; and
 - (b) thirty six (36) calendar months, calculated from the last day of the calendar month in which the medical certificate is issued, where the applicant is 40 years of age or more on the date on which the medical certificate is issued.
- (5) Notwithstanding the provisions of sub-regulations (1), (2) (3) and (4), a DAME may
 - (a) if indications require that
 - (i) medical examinations or tests be performed at shorter intervals; or
 - (ii) additional examinations or tests be performed; or

(b) when the safe performance of the duties essential to the operation of an aircraft executed by the holder of such medical certificate, depends on a reduction in the period of validity of such medical certificate or compliance with any special limitation,

reduce the period of validity of such medical certificate and endorse the medical certificate with the reason for such reduction or with any such requirement or limitation.

- (6)(a) The holder of a medical certificate shall, at least 15 days immediately preceding the date on which such medical certificate expires, apply for the extension of such medical certificate.
- (b) Notwithstanding the provisions of sub-regulations (1), (2), (3), (4) and (5), the Director may, on such conditions as he or she considers necessary, extend the medical certificate for a period not exceeding 30 days.

Application for medical certificate

- **67.00.7** (1) An application for the issuing of a medical certificate shall be made on the appropriate prescribed form.
- (2) An applicant who attends a medical examination or test for the issuing of a medical certificate shall
 - (a) produce proof of his or her identity; and
 - (b) produce for inspection any licence held for which the certificate is required and the most recent medical certificate held, if any.
- (3) Subject to the provisions of regulations 67.00.3(2)(c) and 67.00.4(3)(b)(iii), an applicant who complies with the appropriate medical requirements and standards referred to in regulation 67.00.2(6), shall be entitled to a medical certificate.

Issuing of medical certificate

- **67.00.8** (1) A medical certificate shall be issued by the DAME concerned on the appropriate prescribed form.
- (2) The DAME concerned shall, within 60 days from the date on which the medical certificate has been issued, submit the original application together with any appropriate
 - (a) supporting medical reports; and
 - (b) results of medical examinations or tests performed,

to the designated body or institution for verification purposes.

(3) On receipt of the documents referred to in sub-regulation (2), the designated body or institution shall verify that the holder of the medical certificate complies with the appropriate medical requirements and standards referred to in regulation 67.00.2(6).

- (4) A medical certificate issued by a DAME, shall remain in force, subject to any requirement or limitation endorsed thereon and for the period for which it was issued: Provided that the designated body or institution may
 - (a) if the medical certificate has been issued to an applicant who does not comply with the appropriate medical requirements and standards referred to in regulation 67.00.2(6), cancel the medical certificate; or
 - (b) if medical conclusion requires that -
 - (i) medical examinations or tests be performed at shorter intervals;
 - (ii) additional examinations or tests be performed; or
 - (iii) when the safe performance of the duties essential to the operation of an aircraft, of the holder of the medical certificate, depends on compliance with any special limitation, endorse the medical certificate with such requirement or limitation.
- (5) For the purposes of sub-regulation (2), the words "original application" includes any incomplete application.

Duties of holder of medical certificate

- **67.00.9** (1) The holder of a medical certificate shall
 - (a) carry such medical certificate on his or her person when carrying out the duties as a flight crew member, an air traffic service personnel member or a cabin crew member, as the case may be;
 - (b) not under any circumstances act as a PIC, or in any other capacity as a flight crew member, an air traffic service personnel member or a cabin crew member, as the case may be –
 - (i) while he or she is aware of any medical condition or medication which could affect the validity of such medical certificate;
 - (ii) while she is pregnant during periods and under circumstances as prescribed in Document SA-CATS 67;
 - (iii) if the holder has given birth in the preceding six weeks; or
 - (iv) after such medical certificate has expired;
 - (c) without undue delay, notify the designated body or institution of any -
 - (i) injury;
 - (ii) hospitalisation;
 - (iii) surgical operation or invasive procedure;
 - (iv) regular use of medication;
 - (v) pregnancy;

- (vi) absence due to illness for a period of more than 21 days; or
- (vii) psychiatric treatment, which renders such holder unable to comply with the appropriate medical requirements and standards referred to in regulation 67.00.2(6).
- (2) For the purposes of sub-regulation (1)(c), the holder of a medical certificate shall, before such holder resumes the exercising of the privileges of the licence held by him or her, furnish the designated body or institution with proof that he or she has fully recovered from the decrease in medical fitness.
- (3) The holder of a Class 4 medical certificate shall, after the medical certificate has been issued to him or her, on an annual basis complete and submit to the designated body or institution the medical declaration as prescribed in Document SA-CATS 67.
- (4) No flight crew member shall -
 - (a) consume any alcohol less than 8 hours prior to the specified reporting time for operational duty or the commencement of a shift;
 - (b) commence an operational duty while the concentration of alcohol in any specimen of blood taken from any part of his or her body is more than 0,02 gram per 100 milliliters;
 - (c) consume alcohol during the operational duty period or whilst on standby for operational duty; and
 - (d) commence an operational duty period while under the influence of liquor or any drug having a narcotic effect.
- (5) Flight crew members shall not
 - (a) exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance which might render them unable to safely and properly exercise these privileges; and
 - (b) engage in any problematic use of substances.

Validations

- **67.00.10** (1) The Director may, after consultation with the designated body or institution, recognise any foreign medical report, medical assessment or medical certificate issued by an appropriate authority for the purpose of validating a foreign flight crew member's licence, air traffic service personnel member's licence or cabin crew member's licence.
- (2) If, because of duty in a State or territory outside the Republic, deferral of the issuing of a South African medical certificate for a flight crew member or a cabin crew member, as the case may be, has to be made, such deferral shall not exceed –

- (a) a single period of six months in the case of a flight crew member of an aircraft used in non-commercial operations; or
- (b) two consecutive periods, each of three months, in the case of a flight crew member or a cabin crew member, as the case may be, of an aircraft used in commercial operations: Provided that the flight crew member or cabin crew member concerned
 - (i) obtains in that State or territory, in either instance, a valid medical certificate after examination by an appropriate authority; and
 - (ii) undergoes the appropriate medical examination as soon as he or she returns to the Republic.

Foreign medical examinations

- **67.00.11** (1) The Director may recognise any foreign medical report, history and examination form and investigations issued by an appropriate authority for the purposes of renewing a flight crew member's licence.
- (2) The holder of the licence referred to in sub-regulation (1)) shall submit all the medical records, which may include, but is not limited to, a history and examination form signed by both the licence holder and the examining doctor registered with the appropriate authority, and all relevant investigations.
- (3) All medical records submitted in terms of this regulation should be in English, or, if originally in a foreign language, translated into English by an official translator.

Period of validity of medical records

67.00.12 The records of a medical examination shall, for the purpose of issuing a medical certificate, be valid for a period not exceeding 90 days, and a medical certificate may not be issued after this period on the records of such examination.

Substance abuse

- **67.00.13** (1) If there is reasonable suspicion that the holder of a medical certificate is abusing substances, and thereby poses a risk to aviation safety, the medical officer designated in terms of regulation 67.00.1(2) may require such holder to undergo substance abuse testing, which shall be done as prescribed in Document SA-CATS 67.
- (2) Reasonable suspicion may be as a result of but not limited to:
 - (a) observation of physical symptoms;
 - (b) Physical-, behavioural-, performance indicators;
 - (c) Direct observation of substance use

- (d) A pattern of abnormal conduct / erratic behaviour;
- (e) Arrest or conviction for a drug related offence; or
- (f) Being the target of a criminal investigation for such an offence;
- (g) Evidence of tampering with previous substance test specimen;
- (h) Post rehabilitation.
- (3) The holder of a medical certificate must submit themselves within 48 hours of being required to do so, for preliminary substance abuse testing to a Collection Officer appointed by the Director, or to a DAME at the holder's expense, as prescribed in Document SA-CATS 67.
- (4) A holder of a medical certificate who has undergone preliminary testing must be informed of the results within three days of receipt thereof.
- (5) The medical officer referred to in sub-regulation (1) may suspend the medical certificate of a person who has received a non-negative result and such person must be subjected to further confirmatory testing.
- (6) The holder of a medical certificate who has received a negative result must be refunded of medical expenses incurred for collection and analysis of specimen in respect of the substance abuse testing.
- (7) The holder of a medical certificate who submits himself or herself after 48 hours of being required to do so is required to undergo confirmatory testing, as prescribed in the SA-CATS 67.
- (8) The medical officer designated in terms of regulation 67.00.1(2) shall suspend, , the medical certificate of a person who refuses to submit himself or herself to a substance abuse testing after being required to do so.
- (9) The holder of a medical certificate whose medical certificate is suspended in terms of sub-regulation (5) or (8) may appeal to the Director against the suspension within 14 days from the date of the suspension.

- (10) The provisions of regulation 185.00.6 apply, with the necessary changes, to an appeal lodged in terms of sub-regulation (9).
- (11) The site and specimen collection, packaging, transport and lab analysis must be done as prescribed in Document SA-CATS 67.

Suspension or cancellation of medical certificate

- **67.00.14** (1) A medical officer designated in terms of regulation 67.00.1 (2) may suspend a medical certificate if there is a reasonable suspicion that the holder of the medical certificate does not comply with the requirements prescribed in regulation 67.00.9.
- (2) The medical officer may require the holder of a medical certificate whose certificate has been suspended in terms of this regulation, to undergo medical examination at the holder's expense, at a medical specialist chosen by the medical officer.
- (3) A notice of the suspension of medical certificate contemplated in sub-regulation (1) must be given in writing, stating the reasons for the suspension.
- (4) Notwithstanding sub-regulation (3), the medical officer may notify the holder of the medical certificate of the suspension otherwise than in writing: Provided that a written notification of such suspension is submitted to the holder immediately thereafter.
- (5) A person whose medical certificate is suspended in terms of sub-regulation (1) may appeal to the Director against the suspension within 14 days from the date of the suspension.
- (6) The provisions of regulation 185.00.6 apply, with the necessary changes, with regard to the appeal contemplated in sub-regulation (5).
- (7) The holder of a medical certificate who succeeds in an appeal against the suspension shall be refunded the expenses referred to in sub-regulation (2).

Medical confidentiality

- **67.00.15** (1) Subject to the provisions of sub-regulation (2), all information provided by or on behalf of an applicant for a medical certificate, which is personal medical information, shall be confidential, and shall be used only in respect of the medical certificate and the entire medical certification process, unless otherwise authorised by the applicant.
- (2) Any medical practitioner employed by the designated body or institution shall ensure the protection of information referred to in sub-regulation (1) which is kept by such designated body or institution: Provided that when medical information appears to be fraudulent, false or

misleading, or when such medical information will jeopardise aviation safety, or when it is necessary for the purpose of an appeal in terms of regulation 67.00.13, the medical practitioner shall release to the Director such information for appropriate investigation and action

PART 68: GLIDER PILOT LICENCE

SUBPART 1: GENERAL

68.01.1	Applicability	
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SUBPART 1: GENERAL

Applicability

68.01.1 This Part applies to the issuing, revalidating and re-issuing of South African glider pilot licences and ratings; validation of foreign pilot licences and ratings issued by a Contracting State; conversion of foreign pilot licences and ratings issued by a Contracting State; and matters related thereto.

Authority to act as pilot

- **68.01.2** (1) No person shall act as the pilot of a glider whilst in or over any part of the Republic or the territorial waters thereof unless such person
 - (a) holds a valid appropriate pilot licence and rating issued by the Director in terms of this Part; or
 - (b) holds a valid pilot licence and rating issued by an appropriate authority and validated by the Director in terms of this Part; or

- (c) if the glider is of a foreign nationality, either
 - (i) holds a valid pilot licence and rating issued by the appropriate authority of the State of Registry, provided such State is a Contracting State; or
 - (ii) has obtained the permission of the Director, if the State of Registry is not a Contracting State.
- (2) The holder of a glider pilot licence shall not exercise any privileges other than the privileges granted by the appropriate licence and rating or validation held by such holder.
- (3) The holder of a validation of a foreign pilot licence shall adhere to all the requirements and limitations prescribed by this Part in respect of the holder of a glider pilot licence when exercising the privileges of his or her validation as a glider pilot licence.

Ratings for glider pilots

68.01.3 The ratings for glider pilots are -

- (a) a class rating:
 - (i) conventional gliders (single and multi seat); with the following sub classes:
 - (aa) Long wing span flapped;
 - (bb) Short wing span flapped;
 - (cc) Short wing span un-flapped;
 - (ii) self launch and sustainer gliders (single and multi seat).
- (b) a rating for special purposes:
 - (i) aerotug launch rating;
 - (ii) winch launch rating;
 - (iii) Auto tug;
- (c) glider instructor rating:
 - (i) Assistant glider pilots instructor rating; and
 - (ii) Glider pilots instructor rating;
- (d) touring motor glider rating issued in terms of Part 62.

Competency

- **68.01.4** (1) A holder of a glider pilot licence or rating shall not exercise the privileges granted by the licence or rating unless such holder maintains competency by complying with the appropriate requirements prescribed in these Regulations.
- (2)(a) The holder of a glider pilot licence shall undergo a general proficiency check no later than 12 months from the date of initial issue, and thereafter within a period of 24 months of each previous proficiency check.
- (b) The proficiency check, or the annual revalidation procedure, as the case may be, shall include a review of applicable regulations, NOTAMs and AICs.
- (c) The provisions of sub-regulations (6) and (7) applies with the necessary changes in respect of the annual revalidation procedure.
- (3) Where the holder of a glider pilot licence has not maintained competency by passing the general proficiency check or an initial skills test within the 24 months following the issue or revalidation of a glider pilot licence, he or she shall comply with the following requirements
 - (a) where the maintenance of competency has lapsed for less than 24 months, he or she shall, in the same class for which he or she previously held a class endorsement be required to
 - (i) undergo a minimum of one period of dual training of not less than one hour;
 - (ii) practice at least 1 hour solo flight; and
 - (iii) pass a general proficiency check.
 - (b) in the case where the maintenance of competency has lapsed by more than 24 months, but less than 60 months, he or she shall be required to
 - (i) rewrite the Air Law examination;
 - (ii) undergo a minimum of two periods of dual training of not less than one hour:
 - (iii) practice a minimum of 3 hours solo flight; and
 - (iv) pass a general proficiency check;
 - (c) where the maintenance of competency has lapsed by more than 60 months, the licence holder shall be required to comply with the initial issue requirements of regulation 68.03.2.
- (3) The proficiency check, referred to in sub-regulation (2), may be conducted by a glider instructor who is the holder of the appropriate class and sub-class rating.
- (4) The proficiency check shall consist of a skills test without the need for a cross country flight test as defined in Document SA-CATS 68, to be conducted in an glider of the class and subclass for which he or she is licensed.
- (5) (a) The person, conducting the proficiency check, shall enter the outcome of the proficiency check in the pilot's logbook and sign it accordingly, and submit the relevant test report to the Director, or to the organisation designated for the purpose in terms of Part 149 of the Regulations, as the case may be.

- (b) The test report, referred to in paragraph (a), shall be countersigned by the pilot, and the pilot concerned shall be provided with a copy thereof.
- (6) Where a pilot fails a proficiency check
 - the pilot shall undergo corrective training with a flight instructor, other than the person who conducted the failed proficiency check, before submitting himself or herself for a retest;
 - (b) no retest shall be conducted without a letter of recommendation by the instructor referred to in paragraph (a).
- (7) (a) The holder of a glider pilot licence shall pay annually the applicable currency fee as prescribed in Part 187 on the anniversary date of his or her licence.
- (b) The holder shall submit, together with the currency fee, a summary of his or her logbook for the previous 12 months in the format prescribed in Document SA-CATS 68 unless if during the preceding 12 months a six-monthly or annual summary was submitted as part of an application for the issue, renewal or reissue of a rating.
- (8) (a) If the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be suspects that a person, licensed in terms of this Part, has failed to maintain the minimum standard required to exercise the privileges of the glider pilot licence or any of the ratings that he or she holds, the Director or the said organisation may, after having afforded the licence holder an opportunity to respond, give in writing the licence holder reasonable notice of such suspicion.
- (b) The Director or the said organisation may then require the person to undergo, by a date specified by the Director or the said organisation, the skill test or all or some of theoretical knowledge examinations prescribed in this Part in respect of such licence or rating.
- (9) Should the tests or examinations, referred in sub-regulation (8), show that the standard of the licence or rating holder is below that required for the licence or rating concerned, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall suspend the holder from exercising all or any of the privileges of that licence or rating until such time as the holder can show that he or she is again able to meet the skill or theoretical knowledge requirements for that licence or rating.
- (10) If the person, who has been duly notified in terms of sub-regulation (8), fails without reasonable cause to present himself or herself by the specified date to undergo the test or examination prescribed, his or her standard shall be deemed to be below that required for the licence or rating concerned and the provisions of sub-regulation (9) shall with the necessary changes apply.
- (11) The holder of a lapsed or expired glider pilot licence issued in terms of this Part, may for the purpose of renewing his or her licence or rating as contemplated in this Part, exercise the privileges of the glider student pilot licence provided for in this Part, provided that the holder has an appropriate current medical certificate.

Medical fitness

- **68.01.5** (1) An applicant for, or holder of, a glider pilot licence shall hold an appropriate valid medical certificate issued in terms of Part 67 of these Regulations, and he or she shall submit a copy thereof to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.
- (2) The holder of a glider pilot licence issued in terms of this Part shall—
 - (a) not exercise the privileges of that licence
 - (i) unless that person
 - (aa) holds an appropriate valid medical certificate or medical fitness certificate, as the case may be; and
 - (bb) complies with all medical endorsements on that medical certificate or medical fitness certificate:
 - (ii) while he or she is aware of having a medical deficiency that would make him or her unable to meet the medical standards for his or her medical certificate or medical fitness certificate, until he or she has been assessed medically fit again by an aviation medical examiner designated in terms of Part 67 (in the case of the holder of a medical certificate, referred to in subregulation (1), or by a general medical practitioner (in the case of the holder of a medical fitness certificate, referred to in sub-regulation (2).

Language

68.01.6 The applicant for a glider pilot licence, shall have demonstrated his or her ability to use the English language as set out in Document SA-CATS 68.

Logging of flight time

- **68.01.7** (1) The holder of a glider pilot licence shall maintain a record of all his or her flight time and instruction time. Electronic logbooks may be used, provided that the electronic data is printed onto paper at least every 90 days and the printed pages are filed sequentially in a binder.
- (2) The form and information to be contained in the logbook, referred to in sub-regulation (1), and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 68.
- (3) (a) Entries in pilot logbooks shall be made within seven days after the completion of the flight to be recorded.
- (b) Where a pilot is engaged in flight operations away from the base where the pilot logbook is kept normally, the periods specified in paragraph (a) may be extended to 48 hours after return to base.
- (4) Pilot logbooks shall be retained by their holders for at least 60 months from the date of the last flight recorded therein.

- (5) Flight time during which the holder of a glider pilot licence is
 - (a) receiving dual instruction shall be logged as dual flight time, and shall include a record of the air exercises undertaken;
 - (b) the designated PIC shall be logged as PIC time.
- (6) The holder of a student glider pilot licence may log as solo flight time only the flight time when the learner is the sole occupant of the glider.
- (7) A glider flight instructor shall log the time spent in an glider occupying a pilot seat with access to the controls, whilst acting as a flight instructor, as flight instructor time, and may log all flight time whilst acting as such as PIC time.
- (8) A glider flight instructor, acting as an examiner while occupying a pilot seat with access to the flight controls, may log all flight time whilst acting as such as PIC, and shall make the entry EXAMINER in the remarks column. Such time shall not be logged as flight instructor time.

Recognition and validation of pilot licences and ratings issued by an appropriate Authority of a Contracting State

- **68.01.8** (1) (a) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may recognize, through validation, pilot licences and ratings issued by or on behalf of an appropriate authority of a Contracting State where the standard of such foreign licences or ratings is deemed to be equivalent to, or higher than, the South African standard, and on the basis of competence by the holder.
- (b) Document SA-CATS 68 contains a list of Contracting States of which the licences and ratings issued by or on behalf of the appropriate authority are deemed to be of a standard equal to, or higher than, those issued by or on behalf of the Authority.
- (2) (a) Validation of such foreign licences shall apply for flights in a South African registered glider, where such privileges are required for a limited period, not to exceed one year.
- (b) Purposes for which a certificate of validation may be issued include:
 - (i) to exercise the privileges of a glider pilot licence in a South African registered glider;
 - (ii) to conduct demonstration flights in a South African registered glider;
 - (iii) to conduct endorsement training of South African flight crew; or
 - (iv) to participate in sporting or competition events, organised by or under the auspices of sections of the recognised national aero sport body.
- (c) The privileges of the validated foreign licence may not be exercised in commercial air transport operations.
- (3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may deem it necessary for an applicant for a validation to undergo additional theoretical or practical assessments to ensure compatibility with the relevant South African licensing standards.

Application for and issuing of a validation of a foreign pilot licence and ratings

- **68.01.9** (1) The holder of a licence or rating, similar to, or higher than, a pilot licence issued in terms of this Part, issued by or on behalf of the appropriate authority of a Contracting State, who desires to exercise the privileges of such licence or rating as PIC of a South African registered glider, may apply to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, in the appropriate prescribed form, for a validation of such pilot licence or rating.
- (2) No validation shall be considered if the applicant has
 - (a) been refused a South African pilot licence or validation before; or
 - (b) had a South African pilot licence or validation revoked in the past,

for reasons other than failing a skill test, a proficiency test, or a theoretical knowledge test.

- (3) Where, in the opinion of the Director or the designated organisation, the requirements for the issue of a pilot licence by a particular Contracting State are lower than those set by the Republic, the Director or the designated organisation may direct that the applicant meets the higher requirement before granting a validation.
- (4) A pilot licence and rating issued by or on behalf of an appropriate authority of a Contracting State may be validated by the Director or the designated organisation
 - (a) subject to the same restrictions which apply to such pilot licence and rating;
 - (b) subject to such conditions and limitations as the Director or the designated organisation may deem necessary in the interest of aviation safety;
 - (c) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 68; and
 - (d) in the appropriate prescribed form; but
 - (e) to permit privileges not in excess of the equivalent South African glider pilot licence or rating.
- (5) The application for a validation referred to in sub-regulation (1) shall be accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the pilot licence and rating to which the validation refers;
 - (c) a certified true copy of a valid medical certificate or valid medical fitness certificate:
 - (d) a certified true copy of the radiotelephony certificate (if applicable), or, in the case where the Contracting State does not prescribe such certificate for its licence holders, certified proof that the applicant has passed a practical skill test with an approved radio licence examiner;
 - (e) a summary of the applicant's logbook, certified by the applicant to be a true reflection of the hours flown; and
 - (f) any other document prescribed in Document SA-CATS 68.

- (6) The minimum knowledge, experience and skill requirements for the issue of a Certificate of Validation for the various pilot licences and ratings are those prescribed in Document SA-CATS 68 for the South African glider pilot licence and associated ratings.
- (7) Where a proficiency check or skills test is required, such test shall be undertaken in an glider of the class or type for which a certificate of validation is sought.
- (8) The holder of a validation shall comply with all the applicable provisions prescribed in these regulations.
- (9) None of the privileges of an additional rating may be exercised in terms of the certificate of validation before the appropriate authority as applicable has endorsed such privileges on the applicant's foreign pilot's licence however, due regard shall be given to the provision of regulation 68.01.8(2)(c).
- (10) The period of validity of a certificate of validation shall be the lesser of
 - (a) twelve months calculated from the date of issue of such certificate of validation; or
 - (b) the period of validity of the pilot licence and rating to which the validation applies;
- (11) In exceptional cases, such as demonstration flights or specific instruction on glider new for the Republic, the Director or the designated organisation may consider the validation of a foreign licence to meet short-term operational requirements by exempting the applicant from all or some of the requirements of this Part, subject to conditions set by him, her or it for the particular situation.

Documentation

68.01.10 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall ensure that a glider pilot licence and rating is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Register of licences

- **68.01.11** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all glider pilot licences and ratings issued or validated in terms of this Part.
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the licence;
 - (b) date of birth:
 - (c) the postal and residential address of the holder of the licence;
 - (d) the number of the licence;
 - (e) the date on which the licence was issued or validated;
 - (f) particulars of the ratings held by the holder of the licence;
 - (g) the nationality of the holder of the licence; and
 - (h) in the case of a validation, the authority that issued the validated licence or rating.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence or rating is issued or validated.

- (4) The register shall be kept in a safe place at the office of the Director or of the designated organisation.
- (5) A copy of the register shall be furnished by the Director or the designated organisation on payment of the appropriate fee as prescribed in Part 187 to any person who requests the copy: Provided that postal and residential addresses may not be divulged to third parties, except to law enforcement officers or on instruction of the Courts.

Aviation training providers

68.01.12 Any *ab initio* training required by this Part shall be provided only by the holder of an ATO approval issued in terms of Part 141.

Payment of currency fee

- **68.01.13** (1) The holder of a glider pilot licence shall pay the currency fee as prescribed in Part 187, applicable to the type of licence, on the anniversary date of the licence to either the Authority or to the organisation designated for the purpose in terms of Part 149, as the case may be.
- (2) Where applicable, the payment referred to in sub-regulation (1) shall be accompanied by the summary of the last 12 months flying in a glider.

Radiotelephony certificates

- **68.01.14** (a) A holder of a glider pilot licence may also be required to be the holder of a radiotelephony licence as contemplated in section 31 of the Electronic Communications Act, 2005 (Act No. 36 of 2005).
- (b) The requirements for their issue are prescribed in Document SA-CATS 68.

SUBPART 2: GLIDER STUDENT PILOT LICENCE

Requirements for a student glider pilot licence

- **68.02.1** (1) An applicant for the issuing of a student glider pilot licence shall—
 - (a) be not less than 14 years of age;
 - (b) hold a valid medical certificate appropriate to the category of licence ultimately being trained for issued in terms of Part 67;
 - (c) have successfully completed the training referred to in regulation 68.02.2; and
 - (d) have passed the theoretical knowledge examination referred to in regulation 68.02.3.

Training

68.02.2 An applicant for the issuing of a student glider pilot licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 68.

Theoretical knowledge examination

68.02.3 An applicant for the issuing of a student glider pilot licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 68, within the 90 days immediately preceding the date of application.

Certificate of competency

- **68.02.4** (1) If the student glider pilot, in terms of these Regulations, is required to operate radio apparatus while flying solo, a student glider pilot licence may be issued to the applicant who is not in the possession of a certificate of proficiency (aeronautical), provided that he or she is the holder of a certificate of competency issued in three phases prior to solo flight as prescribed in subparagraphs (b)(i), (ii) and (iii) below by the holder of a flight instructor rating, wherein it is certified that
 - (a) the applicant has undergone basic training in the use of the radio apparatus installed in the glider in which he or she is being trained; and
 - (b) the applicant is considered capable of operating such radio apparatus satisfactorily to undertake solo flights
 - (i) within the circuit area of the aerodrome or approved site where the training flights originate and terminate;
 - (ii) within the associated general flying area of such aerodrome of approved site;
 - (iii) on cross-country flights.
- (2) The basic training and knowledge requirements to be met shall be based on the communication syllabus prescribed in document SA-CATS 68.
- (3) The certificate of competency referred to in sub-regulation (1) shall be valid for as long as the glider student pilot licence is valid.

Application for student glider pilot licence

- **68.02.5** (1) An application for the issuing of a student glider pilot licence shall
 - (a) be made to the Director or the organisation, designated for the purpose in terms of Part 149, as the case may be, in the appropriate form as prescribed by the Director; and
 - (b) be accompanied by -
 - (i) original or certified proof of
 - (aa) the identity of the applicant; and
 - (bb) the age of the applicant;
 - (ii) a valid medical certificate issued in terms of Part 67;
 - (iii) if applicable, the valid restricted or higher grade radiotelephony operator's certificate or the certificate of competency referred to in regulation 68.02.4;

- (iv) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 68.02.3;
- (vi) two recent passport size photographs of the applicant; and
- (vii) the appropriate fee prescribed in Part 187.

Issuing of student glider pilot licence

- **68.02.6** (1) (a) The Director or the organisation, designated for the purpose in terms of Part 149, as the case may be, shall issue a student glider pilot licence if the applicant complies with the requirements referred to in regulation 68.02.1.
- (2) A student glider pilot licence shall be issued in the format, as prescribed in Document SA-CATS 68.
- (3) Upon the issuing of a student glider pilot licence the holder thereof shall forthwith affix his or her signature in ink in the space on the certificate provided for such purpose.

Period of validity

68.02.7 A student glider pilot licence shall be valid for the period for which the holder thereof is the holder of a valid medical certificate issued in terms of Part 67: Subject to the payment of annual currency fee.

Privileges and limitations of student glider pilot licence

- **68.02.8** (1) The holder of a valid student glider pilot licence shall be entitled to fly solo only for the purpose of training for the applicable glider licence or rating
 - (a) in the type of glider in which he or she is undergoing training;
 - (b) after being authorised thereto and while under supervision, as prescribed in subregulation (2);
 - (c) without carrying any passengers;
 - (d) in VMC by day.
 - (e) on a flight other than an international flight
- (2) A student glider pilot shall not fly solo unless authority is granted for a flight, or for a sequence of flights, as prescribed in the relevant practical training course syllabus in Document SA-CATS 68, by the holder of a flight instructor rating who is to supervise the solo flight. The authority shall be in writing and be issued in his or her presence at the time when such flight or sequence of flights is about to commence.

- (3) A student glider pilot shall not fly solo in the circuit unless he or she has successfully completed the practical training and theoretical knowledge examinations as prescribed in Document SA-CATS 68, and his or her logbook has been endorsed to fly solo in the circuit.
- (4) A student glider pilot shall not fly solo outside of the circuit or in the general flying area unless he or she has successfully completed the practical training and theoretical knowledge examinations as prescribed in sub-regulation (3) above and in Document SA-CATS 68, and his or her logbook has been endorsed to do so.
- (5) A student glider pilot shall not fly solo on a cross-country flight unless he has successfully completed the practical training and theoretical knowledge examinations as prescribed in subregulations (3) and (4) above and in Document SA-CATS 68, and his or her logbook has been endorsed to do so.
- (6) (a) Except in an emergency, no student glider pilot shall land or take-off in an glider from an area other than an aerodrome or an approved site.
- (b) If a student glider pilot does execute an emergency landing in an glider in an area other than an aerodrome or an approved site, only the holder of a glider pilot licence with the appropriate class rating, or another pilot approved for the purpose, may fly the glider from the area.

Crediting of flight time

68.02.9 A student glider pilot shall be entitled to be credited in full with all solo and dual instruction flight time towards the total flight time requirement for the initial issue of a glider pilot licence.

SUBPART 3: REQUIREMENTS FOR THE ISSUE OF A RATING BY NAME FOR GLIDERS

Requirements for the issuing of a rating by name for gliders

- **68.03.1** An applicant for the issuing of a rating by name for gliders shall
 - (a) be not less than 16 years of age;
 - (b) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
 - (c) have acquired the experience referred to in regulation 68.02.2;
 - (d) have successfully completed the training referred to in regulation 68.02.3;
 - (e) have passed the theoretical knowledge examination referred to in regulation 68.02.4;
 - (f) have successfully passed the skills test referred to in regulation 68.02.5; and
 - (g) hold at least a valid class 4 medical certificate issued in terms of Part 67.
 - (h) be a member of an approved aviation recreation organization

Experience

- **68.03.2** (1) An applicant for the issuing of an initial class rating by name for conventional gliders shall have completed not less than 40 flights as a pilot of a conventional glider which shall include
 - (a) a minimum total of 20 solo flights, and
 - (b) a minimum of 10 flights accumulated per launch method; and
 - (c) a minimum of 6 hours of solo flight, of which;
 - (i) one flight must be at least two hours;
 - (ii) one flight if minimum 30 minutes flight time, with
 - (aa) the launch not exceeding 3000 ft AGL of the intended landing site; and
 - (bb) an ascend of at least two times the launch height.
- (2) An applicant for the issuing of an initial class rating by name for self launch or sustainer gliders shall have completed not less than 40 flights as a pilot of a self launch or sustainer gliders which shall include
 - (a) a minimum total of 20 solo flights,
 - (b) a minimum of 10 flights accumulated on self launch or sustainer assisted gliders; and
 - (c) a minimum of 6 hours of solo flight, of which;
 - (i) one flight if minimum 30 minutes flight time continuous engine off, with
 - (aa) shutdown not exceeding 3000 ft AGL of the intended landing site;
 - (bb) an ascend of at least two times the launch (engine off) height.
- (3) An applicant for the issuing of an initial or additional rating by name for touring motor gliders as the case may be, shall have completed the requirements as per Subpart 17 of Part 62.
- (4) An applicant for the issuing of an additional sub-class rating by name, in the applicable class shall have completed not less than
 - (a) minimum total of 1 flight, including 1 solo flight; and
 - (b) one flight of minimum 30 minutes flight time
- (5) Notwithstanding the provisions of sub-regulations (1) and (2), to obtain a first class rating for a glider, an applicant may be credited with dual instruction flights on a touring motor glider, accumulated as the holder of a licence issued in terms of Part 62 in the category touring motor gliders, towards the minimum total flights required.
- (6) Notwithstanding the provisions of sub-regulation (1), (2) and (4), in the case of an applicant with reasonable experience in another other class who wants to obtain a class rating for gliders, they will have to complete not less than:
 - (a) minimum total of 1 flight, including 1 solo flight; with
 - (b) one flight of 30 minutes flight time.

(7) Notwithstanding the provisions of sub-regulations (1), (2) and (4), in the case of an applicant with extensive experience as the holder of a pilot licence issued in terms of Part 61 or Part 62, the requirements may be relaxed, for a glider first class rating, to the minimum requirements according to sub-regulation (5) at the discretion of the flight instructor who conducts the skills test.

Training

68.03.3 An applicant for the issuing of an class rating by name for gliders shall have successfully completed the appropriate training as prescribed in Document SA-CATS 68.

Theoretical knowledge examination

- **68.03.4** (1) An applicant for the issuing of an class rating by name for gliders shall have passed the appropriate written examination as prescribed in Document SA-CATS 68.
- (2) Notwithstanding the provisions of sub-regulation (1), the applicant with extensive experience, who is the holder of a pilot licence issued in terms of Part 61 or Part 62 endorsed with the categories weight shift controlled microlight aeroplane, conventionally controlled microlight aeroplane, gyroplane, light sport aeroplane or touring motor glider may be given credit for any theoretical examination at the discretion of the testing instructor.
- (3) Notwithstanding the provisions of sub-regulation (2), the applicant who is the holder of a national pilot licence endorsed for the category weight shift controlled microlight aeroplane or gyroplane must write "principles of flight".

Skills test

- **68.03.5** (1) An applicant for the issuing of an initial class rating by name for gliders shall have demonstrated to the Chief Flying Instructor, the ability to perform, as PIC of a glider, the procedures and manoeuvres as prescribed in Document SA-CATS 68, with a degree of competency appropriate to the privileges granted to the holder of a glider pilot licence.
- (2) The applicant shall undergo the skills test, referred to in sub-regulation (1), within 12 months of passing the theoretical knowledge examination referred to in regulation 68.02.4 and within 60 days immediately preceding the date of application.

Ratings for special purposes for a glider pilot licence

- **68.03.6** (1) The ratings for special purposes associated with a glider pilot licence are
 - (a) aerotug launch rating
 - (b) winch launch rating;
 - (c) auto tug;
 - (d) glider instructor rating
 - (i) Assistant Glider Instructor rating; and

- (ii) Glider Instructor rating
- (2)(a) The holder of glider pilot licence may be issued with an aerotug launch rating if -
 - (i) the pilot has completed both the theoretical knowledge examinations and skills test, referred to in regulations 68.02.4 and 68.02.5, specific to the aerotug launch method; and
 - (ii) a minimum of 40 flights, including 20 solo flights and 10 aerotug launches, have been completed.
- (b) The holder of an aerotug launch rating may act as pilot of a glider being launched by the aerotug method.
- (3)(a) The holder of glider pilot licence may be issued with a winch launch rating if
 - the pilot has completed both the theoretical knowledge examinations and skills test, referred to in regulations 68.02.4 and 68.02.5, specific to the winch launch method; and
 - (ii) a minimum of 40 flights, including 20 solo flights and 10 winch launches, have been completed.
- (b) The holder of a winch launch rating may act as pilot of a glider being launched by the winch launch method.
- (4)(a) The holder of glider pilot licence may be issued with a auto tug launch rating endorsement if
 - (i) the pilot has completed both the theoretical knowledge examinations and skills test, referred to in regulations 68.02.4 and 68.02.5, specific to the auto tug launch method; and
 - (ii) a minimum of 40 flights, including 20 solo flights and 10 auto tug launches, have been completed.
- (b) The holder of a auto tug launch rating may act as pilot of a glider being launched by the auto tug launch method.

Application

- **68.03.7** An application for the issuing of an class rating by name for gliders shall
 - (a) be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
 - (b) be accompanied by -
 - (i) a valid application for the issue of such licence;
 - (ii) certified proof that the requirements prescribed in regulation 68.02.1 or 68.02.7, if applicable, have been complied with; and
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that the fees set by the latter may not exceed those prescribed in Part 187.

Issuing

- **68.03.8** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue an class rating by name for gliders if the applicant complies with the requirements referred to in regulation 68.03.1.
- (2) An class rating by name for gliders shall be issued in the format prescribed in Document SA-CATS 68.

Period of validity

68.03.09 An class rating by name for gliders shall be valid for as long as the glider pilot licence itself remains valid, provided that the privileges of the class rating or sub-class rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 68.03.11.

Privileges and limitations

- **68.03.10** The holder of an class rating by name for gliders shall be entitled to act as PIC of glider for which he or she is rated by name, provided it is not operated for the provision of an air service,
 - (a) within Class F and Class G airspace;
 - (b) within controlled airspace unless -
 - (i) prior permission has been obtained from the responsible ATSU to enter such airspace:
 - (ii) a two-way radio communication as the ATSU may require, is established;
 - (iii) continuous radio watch is maintained; and
 - (iv) while within an aerodrome traffic zone, the appropriate radio position reporting procedure is complied with.

Maintenance of competency

68.03.11 The holder of a class rating by name for gliders shall not act as PIC of a glider unless he or she –

- (a) has acted as PIC of a glider for a minimum of 5 hours flight time or 10 flights in the 12 months immediately preceding the intended flight and such minimum flight time may include check flights or flights undertaken by the pilot whilst receiving training appropriate to the class or sub-class of glider; or
- (b) has passed a skills test with an appropriately rated flight instructor within 90 days immediately preceding the intended flight; and

(c) if transporting a passenger, has within the 90 days immediately preceding the flight on which such passenger is to be transported, as PIC, has executed not less than three flights.

SUBPART 4: GLIDER PILOTS INSTRUCTOR RATINGS

General

- **68.04.1** (1) The applicant for the issue of a glider pilots instructor rating shall
 - (a) be the holder of a valid glider pilot licence issued in terms of this Part
 - (b) hold at least a valid Class 4 medical certificate issued in terms of Part 67;
 - (c) have acquired the experience referred to in regulation 68.04.2;
 - (d) have successfully completed the training referred to in regulation 68.04.3;
 - (e) have passed the theoretical knowledge examination referred to in regulation 68.04.4:
 - (f) have undergone the skills test referred to in regulation 68.04.5; and

Experience

68.04.2 The applicant for the issuing of a glider pilots instructor rating have the following experience –

- (a) for an assistant glider pilots instructor rating:
 - (i) hold a glider class rating
 - (ii) has completed 300 solo flights on gliders or 100 gliding hours total;
 - (iii) has completed a skills test with the Chief Flying Instructor of the relevant approved glider training organisation for the launch methods required; and
 - (iv) obtains approval from the foregoing Chief Flying Instructor.
- (b) for a glider pilots instructor rating:
 - (i) hold a glider class rating
 - (ii) has completed 600 solo flights on gliders or 200 gliding hours total;
 - (iii) has completed 200 flights or 100 hours total as an assistant glider instructor;
 - (iv) has completed a skills test with the Chief Flying Instructor of the relevant approved glider training organisation for the launch methods required; and
 - (v) obtains approval from the foregoing Chief Flying Instructor.

Training

68.04.3 The applicant for the issuing of a glider pilots instructor rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 68.

Theoretical knowledge examination

68.04.4 The applicant for the issuing of a glider pilots instructor rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 68.

Skills test

- **68.04.5** (1) The applicant for the issuing of a glider pilots instructor rating shall have demonstrated to an appropriately rated flight instructor the ability to perform as a flight instructor the procedures and manoeuvres as prescribed in Document SA-CATS 68 with a degree of competency appropriate to the privileges granted to the holder of a glider pilots instructor rating.
- (2) The skills test, referred to in sub-regulation (1), shall be demonstrated in a glider for which the glider pilots instructor rating is sought.
- (4) The applicant shall undergo the skill test, referred to in sub-regulation (1), within 12 months of passing the theoretical knowledge examination, referred to in regulation 68.03.4, and within the 90 days immediately preceding the date of application.

Application

68.04.6 An application for the issue of glider pilots instructor rating shall be made to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 of the Regulations, as the case may be, on the appropriate form, as prescribed in document SA-CATS 68, and be accompanied by –

- (a) a valid licence reference number, held by the applicant;
- (b) the original or certified proof that the applicant has passed the theoretical knowledge examination, referred to in regulation 68.03.4;
- (c) the skill test report as prescribed in Document SA-CATS 68; and
- (d) the appropriate fee as prescribed in Part 187 of the Regulations.

Issuing of the glider pilots instructor rating

68.04.7 The Director, or, if applicable, the organisation designated for the purpose in terms of Part 149 of the Regulations, as the case may be, shall issue the appropriate glider pilots instructor rating if the applicant complies with the requirements referred to in regulation 68.03.1, on the appropriate prescribed form.

Privileges and limitations

68.04.8 The holder of a valid glider pilots instructor rating shall be entitled to conduct flight instruction for reward under the auspices of an appropriately rated ATO, approved in terms of Part 141 of these Regulations, in an glider for which he or she holds a valid class rating by name, to the extent of the privileges of the particular glider pilots instructor rating held as follows –

- (a) in the case of a assistant glider pilot instructor -
 - (i) conduct *ab initio* training conducted by an approved glider training organisation, such as ground-handling exercises, daily-and pre-flight inspection training, duty officer training, etc
 - (ii) provide official introductory flights;
 - (iii) presenting theoretical lectures;
 - (iv) mark exams and sign application forms;
 - (v) conduct and supervise basic and medium advanced upper-air flight training, including launch and landings;
 - (vi) conduct theoretical and technical examinations, perform a skills test, perform type rating training and issue additional type ratings;
 - (vii) supervise and authorize follow-on solo flights for the holders of glider student pilot licence, within gliding distance of the airfield, or outside with specific permission from a glider pilot instructor.
- (b) in the case of a glider pilot instructor rating
 - (i) exercise all the privileges of a assistant glider pilot instructor rating;
 - (ii) conduct all stages of flight training;
 - (iii) authorize first solo flights of holders of glider student pilot licence;
 - (vi) conduct all levels of theoretical training;
 - (v) conduct theoretical and technical examinations, a skill test, and issue a class rating; and
 - (iv) may take full authority at the training organization in the absence of an appointed chief flight instructor.

Renewal

68.04.9 To renew a glider pilots instructor rating –

- have attended an approved flight instructor refresher seminar, as prescribed in Document SA-CATS 68, within the two years immediately preceding the date of expiring of such rating;
- (b) have logged within 12 months immediately preceding the date of expiry, a minimum of 5 flight hours and a total 10 flights PIC; and
 - (i) have provided 30 instruction launches in the three years preceding the expiry date, of which 15 launches should be within 12 months immediately preceding the date of expiry of such rating; or
 - (ii) within the 90 days immediately preceding the date of expiry of the rating have undergone the skill test referred to in regulation 68.04.5.

SUBPART 5: REQUIREMENTS FOR THE ISSUE OF A GLIDER POST MAINTENANCE AND REPAIR TEST FLIGHT RATING AND A GLIDER TEST FLYING RATING

General

- **68.05.1** (1) No person shall act as test pilot of a glider unless he or she is the holder of a valid pilot's licence with a glider test pilot's rating.
- (2) Test flights may only be performed by pilots rated on the glider within a class and rated as a glider test pilot.
- (3) For a systems acceptance flight, the PIC must be rated as PIC for the class and type of glider and all test flights must be done in line with the manufacturer's requirements.

Requirements

- **68.05.2** (1) An applicant for a glider pilot licence with a post maintenance test flight rating shall
 - (a) hold at least a valid glider pilot licence;
 - (b) be the holder of the appropriate glider class rating;
 - (c) have at least 300 hours total flight time of which not less than 200 hours must be PIC of a glider;
 - (d) have acquired the experience referred to in regulation 68.05.3;
- (2) An applicant for a glider pilot licence with a test pilot rating shall
 - (a) hold at least a valid glider pilot licence;
 - (b) be the holder of the appropriate glider class rating;
 - (c) have at least 700 hours total flight time of which not less than 500 hours must be PIC of a glider;
 - (d) have acquired the experience referred to in regulation 68.05.3;

Experience

68.05.3 An applicant shall –

- (a) in the case of an application for a glider post maintenance test flight rating, attend the basic test flying techniques course as set out in SA-CATS 68;
- (b) In the case of an application for a glider test pilot rating, attend the advanced test flying techniques course as set out in SA-CATS 68.

Application

- **68.05.4** An application for the issuing of a glider post maintenance test flight rating or a glider test pilot rating shall be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form and accompanied by
 - (a) the appropriate fee prescribed in Part 187; and
 - (b) a copy of the applicant's logbook, duly summarised, showing the required flying experience.

Issuing

68.05.5 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's glider pilot licence with either a glider test pilot rating or a glider post maintenance test flight rating if the applicant complies with the requirements referred to in regulation 68.05.2.

Privileges and limitations

- **68.05.6** (1) The holder of a glider post maintenance test flight rating shall be entitled to act as PIC of a glider, in a class for which the pilot has a glider post maintenance test flight rating to conduct a post maintenance test flight, or proving flights.
- (2) The holder of a glider test pilot rating shall be entitled to act as PIC of a glider to conduct test flights, post maintenance test flights, and initial test flights.

PART 69: FREE BALLOON PILOT LICENCE

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General

SUBPART 1: General

Applicability

69.01.1 This Part applies to the issuing, revalidating and re-issuing of South African free balloon pilot licences and ratings; validation of foreign pilot licences and ratings issued by a Contracting State; conversion of foreign pilot licences and ratings issued by a Contracting State; and matters related thereto.

Authority to act as pilot of a balloon

- **69.01.2** (1) No person shall act as the pilot of a balloon whilst in or over any part of the Republic or the territorial waters thereof unless such person
 - (a) holds a valid appropriate pilot licence and rating issued by the Director or body designated for the purpose as the case may be in terms of this Part; or
 - (b) holds a valid pilot licence and rating issued by an appropriate authority and validated in terms of this Part; or
 - (c) if the balloon is of a foreign nationality, either
 - (i) holds a valid pilot licence and rating issued by the appropriate authority of the State of Registry, provided such State is a Contracting State; or
 - (ii) has obtained the permission of the Director or body designated for the purpose as the case may be, if the State of Registry is not a Contracting State.
- (2) The holder of a free balloon pilot licence shall not exercise any privileges other than the privileges granted by the appropriate licence and rating or validation held by such holder.
- (3) The holder of a validation of a foreign pilot licence shall adhere to all the requirements and limitations prescribed by this Part in respect of the holder of a free balloon pilot licence when exercising the privileges of his or her validation as a free balloon pilot.

Ratings for free balloon pilots

- **69.01.3** (1) The ratings for free balloon pilots are as follows
 - (a) Class rating:
 - (i) Class 1 For balloons up to 120,000 ft³
 - (ii) Class 2 For balloons of 120,001 ft³ and up to 240,000 ft³
 - (iii) Class 3 For balloons of 240,001 ft³ and up to 360,000 ft³
 - (iv) Class 4 For balloons of 360,001 ft³ and more.
 - (b) Rating for special purposes:
 - (i) Commercial balloon pilot rating.

Competency

- **69.01.4** (1) No holder of a free balloon pilot licence or rating shall exercise the privileges granted by the licence or rating unless such holder maintains competency by complying with the appropriate requirements prescribed in these Regulations.
- (2) (a) The holder of a free balloon pilot licence shall pay annually the applicable currency fee as prescribed in Part 187 on the anniversary date of his or her licence.

- (b) The fee referred to in paragraph (a) shall be accompanied by a summary of the holder's logbook in the format prescribed in Document SA-CATS 69.
- (c) Notwithstanding the provision of paragraph (a), no summary shall be required to accompany the currency fee if during the preceding 12 months a six-monthly or annual summary was submitted as part of an application for the issue, renewal or reissue of a rating.
- (3)(a) If the Director, or the organisation designated for the purpose in terms of Part 149, as the case may bet suspects that a person, licensed in terms of this Part, has failed to maintain the minimum standard required to exercise the privileges of the free balloon pilot licence or any of the ratings that he or she holds, the Director or the said organisation may, after having afforded the licence holder an opportunity to respond, give in writing the licence holder reasonable notice of such suspicion.
- (b) The Director or the said organisation may then require the person to undergo, by a date specified by the Director or the said organisation, the skill test or all or some of theoretical knowledge examinations prescribed in this Part in respect of such licence or rating.
- (4) Should the tests or examinations, referred in sub-regulation (3), show that the standard of the licence or rating holder is below that required for the licence or rating concerned, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall suspend the holder from exercising all or any of the privileges of that licence or rating until such time as the holder can show that he or she is again able to meet the skill or theoretical knowledge requirements for that licence or rating.
- (5) If the person, who has been duly notified in terms of sub-regulation (3), fails without reasonable cause to present himself or herself by the specified date to undergo the test or examination prescribed, his or her standard shall be deemed to be below that required for the licence or rating concerned and the provisions of sub-regulation (4) shall with the necessary changes apply.

Medical fitness

- **69.01.5** (1) An applicant for, or holder of, a free balloon pilot licence shall hold an appropriate valid medical certificate issued in terms of Part 67 of these Regulations, and he or she shall submit a copy thereof to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.
- (2) The holder of a free balloon pilot licence issued in terms of this Part shall—
 - (a) not exercise the privileges of that licence
 - (i) unless that person
 - (aa) holds an appropriate valid medical; and
 - (bb) complies with all medical endorsements on that medical certificate;
 - (ii) while he or she is aware of having a medical deficiency that would make him or her unable to meet the medical standards for his or her medical certificate, until he or she has been assessed medically fit again as required in terms of Part 67.

Language

69.01.6 The applicant for a free balloon pilot licence, to be issued under this Part, shall have demonstrated his or her ability to use the English language as set out in Document SA-CATS 69.

Logging of flight time

- **69.01.7** (1) The holder of a free balloon pilot licence shall maintain a record of all his or her flight time and instruction time. Electronic logbooks may be used, provided that the electronic data is printed onto paper at least every 90 days and the printed pages are filed sequentially in a binder.
- (2) The form and information to be contained in the logbook, referred to in sub-regulation (1), and the manner in which such logbook are maintained, shall be as prescribed in Document SA-CATS 69.
- (3) (a) Entries in pilot logbooks shall be made within seven days after the completion of the flight to be recorded.
- (b) Where a pilot is engaged in flight operations away from the base where the pilot logbook is kept normally, the period specified in paragraph (a) may be extended to 48 hours after return to base.
- (4) Pilot logbooks shall be retained by their holders for at least 60 months from the date of the last flight recorded therein.
- (5) Flight time during which the holder of a free balloon pilot licence is
 - (a) receiving dual instruction shall be logged as dual flight time, and shall include a record of the air exercises undertaken;
 - (b) the designated PIC shall be logged as PIC time.
- (6) A person who is completing training towards a free balloon pilot licence may log as solo flight time only the flight time when the learner is the sole occupant of the aircraft.
- (7) A free balloon instructor shall log the time spent in an aircraft occupying a pilot seat with access to the controls, whilst acting as a flight instructor, as flight instructor time, and may log all flight time whilst acting as such as PIC time.
- (8) A free balloon instructor, acting as an examiner while occupying a pilot seat with access to the flight controls, may log all flight time whilst acting as such as PIC, and shall make the entry 'EXAMINER' in the remarks column. Such time shall not be logged as flight instructor time.

Recognition and validation of pilot licences and ratings issued by an appropriate Authority of a Contracting State

- **69.01.8** (1) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may recognise through validation pilot licences and ratings issued by or on behalf of an appropriate authority of a Contracting State where the standard of such foreign licences or ratings is deemed to be equivalent to, or higher than, the South African qualification being sought as listed in Document SA-CATS 69, and on the basis of competence by the holder.
- (2) (a) Validation of such foreign licences shall apply for flights in South African aircraft, for a limited period, not exceeding one year.
- (b) Purposes for which a certificate of validation may be issued include:
 - (i) to exercise the privileges of a free balloon pilot licence in a South African registered aircraft;
 - (ii) to conduct demonstration flights in a South African registered aircraft;
 - (iii) to conduct endorsement training of South African flight crew; or
 - (iv) to participate in sporting or competition events, organised by or under the auspices of sections of the recognised national aero sport body.
- (c) The privileges of the validated foreign licence may not be exercised in commercial air transport operations.
- (3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may deem it necessary for an applicant for a validation to undergo additional theoretical or practical assessments to ensure compatibility with the relevant South African licensing standards.

Application for and issuing of a validation of a foreign pilot licence and ratings

- **69.01.9** (1) The holder of a licence or rating, similar to, or higher than, a free balloon pilot licence issued in terms of this Part or issued by or on behalf of the appropriate authority of a Contracting State, who desires to exercise the privileges of such licence or rating as PIC of a South African registered aircraft, may apply to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, in the appropriate prescribed form, for a validation of such pilot licence or rating.
- (2) No application for validation shall be considered by the Director if the applicant has
 - (a) been refused a South African pilot licence or validation before; or
 - (b) had a South African pilot licence or validation revoked in the past,

for reasons other than failing a skill test, a proficiency test, or a theoretical knowledge test.

(3) Where, in the opinion of the Director or the designated organisation, the requirements for the issue of a pilot licence by a particular Contracting State are lower than those set by the Republic, the Director or the designated organisation may direct that the applicant meets the higher requirements before granting a validation.

- (4) (a) A pilot licence and rating issued by or on behalf of an appropriate authority of a Contracting State may be validated—
 - (i) subject to the same restrictions which apply to such pilot licence and rating;
 - (ii) subject to such conditions and limitations as the Director or the designated organisation may deem necessary in the interest of aviation safety;
 - (iii) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 69; and
 - (iv) in the appropriate prescribed form.
- (b) The validation referred to in paragraph (a) shall not permit privileges in excess of the equivalent South African free balloon pilot licence or rating.
- (5) The application for a validation referred to in sub-regulation (1) shall be accompanied by
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the pilot licence and rating to which the validation refers;
 - (c) a certified true copy of a valid medical certificate or valid medical fitness certificate;
 - (d) a certified true copy of the radiotelephony certificate (if applicable), or, in the case where the Contracting State does not prescribe such certificate for its licence holders, certified proof that the applicant has passed a practical skill test with an approved radio licence examiner;
 - (e) a summary of the applicant's logbook, certified by the applicant to be a true reflection of the hours flown; and
 - (f) any other document that may be prescribed in Document SA-CATS 69.
- (6) The minimum knowledge, experience and skill requirements for the issue of a Certificate of Validation for the various pilot licences and ratings are those prescribed in Document SA-CATS 69 for the South African free balloon pilot licence and associated ratings.
- (7) Where a proficiency check or skills test is required, such test shall be undertaken in a balloon of the class or type, appropriate to the free balloon pilot licence class for which a certificate of validation is sought.
- (8) The holder of a validation shall comply with all the applicable provisions prescribed in these regulations.
- (9) Subject to regulation 69.01.8(2)(c), the privileges of an additional rating may not be exercised in terms of the certificate of validation before the appropriate authority has endorsed such privileges on the applicant's foreign pilot's licence.
- (10) The period of validity of a certificate of validation shall be the lesser of
 - (a) twelve months calculated from the date of issue of such certificate of validation; or
 - (b) the period of validity of the pilot licence and rating to which the validation applies;
- (11) In exceptional cases, such as demonstration flights or specific instruction on balloons new for the Republic, the Director or the designated organisation may consider the validation of

a foreign licence to meet short-term operational requirements by exempting the applicant from all or some of the requirements of this Part, subject to conditions set by him, her or it for the particular situation.

Documentation

69.01.10 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall ensure that a free balloon pilot licence and rating is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Register of licences

- **69.01.11** (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all free balloon pilot licences and ratings issued or validated in terms of this Part.
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the licence;
 - (b) date of birth;
 - (c) the postal and residential address of the holder of the licence;
 - (d) the number of the licence;
 - (e) the date on which the licence was issued or validated;
 - (f) particulars of the ratings held by the holder of the licence;
 - (g) the nationality of the holder of the licence; and
 - (h) in the case of a validation, the authority that issued the validated licence or rating.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence or rating is issued or validated.
- (4) The register shall be kept in a safe place at the office of the Director or of the designated organisation.
- (5) A copy of the register shall be furnished by the Director or the designated organisation on payment of the appropriate fee as prescribed in Part 187 to any person who requests the copy: Provided that postal and residential addresses may not be divulged to third parties, except to law enforcement officers or on instruction of the Courts.

Aviation training providers

69.01.12 Any *ab initio* training required by this Part shall be provided only by the holder of an ATO approval issued in terms of Part 141.

Payment of currency fee

- **69.01.13** (1) The holder of a free balloon pilot licence shall pay the currency fee as prescribed in Part 187, on the anniversary date of the licence.
- (2) Where applicable, the payment referred to in sub-regulation (1) shall be accompanied by the summary of the last 12 months of flying.

Radiotelephony certificates

- **69.01.14** (a) A holder of a free balloon pilot licence may also be required to be the holder of a radiotelephony licence as contemplated in section 31 of the Electronic Communications Act, 2005 (Act No. 36 of 2005).
- (b) The requirements for their issue are prescribed in Document SA-CATS 69.

SUBPART 2: REQUIREMENTS FOR THE ISSUE OF A FREE BALLOON PILOT LICENCE

- **69.02.1** (1) An applicant for a free balloon pilot licence shall
 - (a) be 17 years or older;
 - (b) hold a valid Class 4 medical certificate, issued in terms of Part 67;
 - (c) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical):
 - (d) have successfully completed the training referred to in regulation 69.02.3;
 - (e) have successfully passed the theoretical knowledge examination referred to in regulation 69.02.4;
 - (f) have undergone the skills test referred to in regulation 69.02.5; and
 - (g) be a member of an approved aviation recreation organization.

Experience

- **69.02.2** An applicant for a free balloon pilot licence shall have completed
 - (a) not less than 16 hours free flying under instruction in a balloon of maximum volume of 120 000 ft³ (3 400 m³);
 - (b) a minimum of eight flights:
 - (c) a minimum of two tethers;
 - (d) a minimum of afternoon flight;
 - (e) a minimum of one fast flight (10 knots);
 - (d) 10 balloon flights as part of the retrieve crew.

Training

69.02.3 An applicant for the issuing of a free balloon pilot licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 69.

Theoretical knowledge examination

69.02.4 An applicant for the issuing of a free balloon pilot licence shall have passed the appropriate written examinations as prescribed in Document SA-CATS 69 within a period of 12 months and have passed the last theoretical knowledge examination within six months preceding the skills test for a free balloon pilot licence.

Skills test

- **69.02.5** (1) An applicant for the issuing of a free balloon pilot licence shall have demonstrated to a licensed balloon pilot approved for such supervision by an organisation designated by the Director or body designated for the purpose as the case may be within 30 days of the last period of dual instruction the ability to perform, as PIC of a free balloon pilot, the procedures and manoeuvres as prescribed in Document SA-CATS 69, with a degree of competency appropriate to the privileges granted to the holder of a free balloon pilot licence.
- (2) The skills test referred to in sub-regulation (1) shall be conducted in a balloon with a maximum capacity of 120 000 ft³ (3 400 m³).

Application for and issue of a free balloon pilot licence

- **69.02.6** (1) An application for a free balloon pilot licence must be made to the Director or body designated for the purpose as the case may be, on the appropriate prescribed form within 30 days of the practical skills test.
- (2) The application referred to in sub-regulations (1) must be accompanied by
 - (a) at least a valid Class 4 medical certificate, issued in terms of Part 67;
 - (b) the applicant's flying logbook proving that the applicant has completed the practical training referred to in regulation 69.02.3, and summarized in the format as prescribed Document SA-CATS 69;
 - (c) proof that the applicant has passed the theoretical knowledge examination referred to in regulation 69.02.4;
 - (d) valid restricted or higher grade radiotelephony operator's certificate;
 - (e) skills test report;
 - (f) two recent passport-size photographs of the applicant;
 - (g) the appropriate fee as prescribed in Part 187; and
 - (h) proof of membership of the relevant approved aviation recreation organization.
- (3) The Director or body designated for the purpose as the case may be must issue a free balloon pilot licence if he or she is satisfied that the applicant complies with the requirements referred to in regulation 69.02.1.
- (4) A free balloon pilot licence must be issued in the appropriate prescribed format.
- (5) The holder of a free balloon pilot licence must, upon receipt of the licence, immediately affix his or her signature thereon in ink in the space provided for such purpose.

Renewal of a free balloon pilot licence

69.02.7 An applicant for the renewal of a free balloon pilot licence shall submit to the Director or body designated for the purpose as the case may be every two years –

- (a) the relevant application on the appropriate form as prescribed by the Director or body designated for the purpose as the case may be;
- (b) his or her logbook showing that he or she has completed not less than two ascends with an average duration of one hour within the 12 months immediately preceding the date of the application;
- (c) the appropriate fee as prescribed in Part 187;
- (d) proof of membership of the relevant approved aviation recreation organization; and
- (e) copies of the last 2 pages of the logbook containing entries indicating a record of flight times including an annual summary indicting flight time per class and total time as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Privileges and limitations of a free balloon pilot licence

69.02.8 (1) The holder of free balloon pilot licence may not exercise the privileges of that licence unless he or she –

- (a) is in possession of at least a valid Class 4 medical certificate, issued to him or her in terms of Part 67;
- (b) has submitted a copy of the medical certificate to the licensing authority, as required in (a); and
- (c) has renewed his or her licence in the preceding 12 months in terms of regulation 69.02.7.
- (2) The holder of a free balloon pilot licence may
 - (a) act as co-pilot of any free balloon on which a co-pilot is not a requirement;
 - (b) not act as PIC of any balloon that is carrying passenger or freight for reward or hire, unless the requirements for the issue of a commercial free balloon ratings are met by complying with Subpart 69.03;
 - (c) act as a PIC of a free balloon in the course of his or her own or employer's business, provided that
 - (i) the flight is only incidental to that business or employment; and
 - (ii) the balloon does not carry passengers or freight for reward or hire.

Period of validity of a free balloon pilot licence

69.02.9 A free balloon pilot licence is valid for period of two years provided that it may be renewed in terms of regulation 69.02.7.

Maintenance of competency

- **69.02.10** The holder of a of a free balloon pilot licence shall not act as PIC of a free balloon carrying passengers unless he or she
 - (a) has in the 90 days immediately preceding the flight carried out a flight of at least 45 minutes duration; and
 - (b) completed not less than 3 take-offs and landings which can be done in one flight.

Class ratings for free balloon pilot licence

- **69.02.11** (1) The class ratings by name for special purposes associated with free balloon pilots are:
 - (a) Class 1 For balloons up to 120,000 ft³
 - (b) Class 2 For balloons of 120,001 ft³ and up to 240,000 ft³
 - (c) Class 3 For balloons of 240,001 ft³ and up to 360,000 ft³
 - (d) Class 4 For balloons of 360,001 ft³ and more.
- (2) An applicant for the issue of a class rating by name for free balloons shall
 - (a) undergo a proficiency test with a licensed balloon pilot, approved for such supervision by an organisation designated by the Director or body designated for the purpose as the case may be, with the appropriate class rating wherein a high standard of vital action drill shall be required;
 - (b) under direct supervision of a licensed balloon pilot, approved for such supervision by an organisation designated by the Director or body designated for the purpose as the case may be, in the case of a single person balloon, perform at least 3 take-offs and 3 landings which may be done in one flight;
 - (c) perform any other exercise considered necessary; and
 - (c) the take-offs and landings referred to in (b);
 - (d) pass the technical examinations as prescribed in Document SA-CATS 69.

SUBPART 3: FREE BALLOON COMMERCIAL PILOT LICENCE

General

- **69.03.1** (1) The commercial operation of free balloons is regulated by Part 136.
- (2) The operator of a commercial air transport balloon shall establish and maintain a ground and flight training programme for flight crew members in his or her employ.
- (3) The provisions of this subpart shall apply in respect of full-time and part-time employed flight crew members.

Requirements for free balloon commercial pilot licence

69.03.2 An applicant for the issuing of a free balloon commercial pilot licence shall –

- (a) be not less than 21 years of age;
- (b) hold at least a valid Class 1 medical certificate issued in terms of Part 67;
- (c) hold at least a valid restricted radiotelephony operator's certificate;
- (d) hold a valid free balloon pilot licence issued in terms of this Part;
- (e) have acquired the experience referred to in regulation 69.03.3;
- (f) have successfully completed the training referred to in regulation 69.03.4;
- (g) have passed the theoretical knowledge examination referred to in regulation 69.03.5; and

Experience

- **69.03.3** (1) A flight crew member employed by the operator of a commercial air transport free balloon shall have successfully completed the initial training and skills tests as prescribed in terms of this Part through an approved ATO and
 - (a) be the holder of a free balloon pilot licence;
 - (b) be the holder of a valid Class 1 medical certificate;
 - (c) for free balloons up to 120,000 cu ft,
 - (i) have a minimum of 100 hours as PIC of any free balloon plus a minimum of 5 hours of experience on supervised operational flights; and
 - (ii) be the holder of a valid flight competence certificate for any hot air balloon up to 120,000 cu ft issued by an approved examiner;
 - (d) for free balloons of 120,001 cu ft and up to 240,000 cu ft, have
 - (i) a minimum of 200 hours as PIC of any free balloon plus a minimum of 5 hours of experience on supervised operational hot air balloon flights on a hot air balloon of 120,000 cu ft or more; and
 - (ii) be the holder of a valid flight test certificate for any hot air balloon up to 240,000 cu ft issued by an approved examiner;
 - (e) for free balloons of 240,001 cu ft and up to 360,000 cu ft,
 - (i) have a minimum of 300 hours as PIC of any free balloon of which a minimum of 100 hours must have been on balloons mentioned in paragraph

- (d) plus a minimum of 5 hours of experience on supervised operational hot air balloon flights on a hot air balloon of 240,000 cu ft or more; and
- (ii) be the holder of a valid flight test certificate for any hot air balloon up to 360,000 cu ft issued by an approved examiner; and
- (f) for free balloons of 360,001 cu ft and more
 - (i) have a minimum of 400 hours as PIC of any free balloon, of which 300 hours should be on free balloons 120,000 cu ft and greater (of which a minimum of 100 hours must have been on balloons mentioned in paragraph (e)) plus a minimum of 5 hours of experience on supervised operational hot air balloon flights on a hot air balloon of 360,001 cu. ft. or more; and
 - (ii) be the holder of a valid flight test certificate for any hot air balloon issued by an approved examiner.

Training

69.03.4 An applicant for the issuing of a free balloon commercial pilot licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 69.

Theoretical knowledge examination

69.03.5 An applicant for the issuing of a free balloon commercial pilot licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 69.

Conversion training

69.03.6 The operator of a commercial air transport free balloon shall ensure that –

- (a) a flight deck crew member completes a type or class conversion course in accordance with the applicable requirements prescribed in terms of this Part, when changing from one type or class of balloon to another type or class for which a new type or class rating is required; and
- (b) a flight deck crew member completes the operator's type conversion course before commencing unsupervised operational flying
 - (i) when changing to a balloon for which a new type or class rating is required; or
 - (ii) when employed by such operator.

Recurrent training and checking

- **69.03.7** (1) The operator of a commercial air transport free balloon shall ensure that
 - each flight deck crew member undergoes recurrent training and checking and that all such training and checking is relevant to the type or variant of balloon on which the flight deck crew member is licensed to operate;

- (b) a recurrent training and checking programme is included in the operations manual referred to in regulation 136.04.2; and
- (c) recurrent training is conducted by -
 - (i) a competent person, in the case of ground and refresher training; and
 - (ii) competent personnel in the case of emergency and safety equipment training and checking.
- (2) The operator shall ensure that, in the case of the operator proficiency check referred to in sub-regulation (1)(a), each flight deck crew member undergoes such checks to demonstrate his or her competence in carrying out normal, abnormal and emergency procedures.
- (3) Upon successful completion of the operator proficiency check referred to in subregulation (1)(a), the operator shall issue a certificate of competency to the flight deck crew member concerned, which certificate shall be valid for a period of twelve calendar months calculated from the last day of the calendar month in which such certificate is issued.
- (4) The operator shall ensure that, in the case of emergency and safety equipment training and checking, each flight deck crew member undergoes training and checking on the location and use of all emergency and safety equipment carried.
- (5) Upon successful completion of the emergency and safety equipment check referred to in sub-regulation (4), the operator shall issue a certificate of competency to the flight deck crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.
- (6) The operator shall ensure that, in the case of ground and refresher training, each flight deck crew member undergoes training every 12 calendar months.

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Applicability

- **91.01.1** (1) Subject to the provisions of sub-regulation (2), this Part applies to
 - (a) aircraft operated within the Republic;
 - (b) aircraft registered in the Republic and operated internationally;
 - (c) persons acting as crew members of aircraft registered in the Republic; and
 - (d) persons who are on board an aircraft operated under this Part.
- (2) Additional rules to, and exemptions from, the provisions of this Part, are prescribed, in respect of
 - (a) the conveyance of dangerous goods, in Part 92;
 - (b) corporate aviation operations, in Part 93;
 - (c) operation of non-type certificated aircraft, in Part 94;
 - (d) commercial operation of non-type certificated aircraft, in Part 96;
 - (e) parachuting operations, in Part 105;
 - (f) aeroplanes engaged in commercial air transport operations carrying more than 19 passengers, in Part 121;
 - (g) helicopters engaged in commercial air transport operations, in Part 127;
 - (h) helicopters engaged in external-load operations, in Part 133;
 - (i) aeroplanes engaged in commercial air transport operations carrying 19 or fewer passengers, in Part 135;
 - (j) operations of balloons, in Part 136;
 - (k) aircraft engaged in aerial work operations, in Part 137; and
 - (I) aircraft engaged in air ambulance operations, in Part 138.

Authority of PIC and crew members

91.01.2 All persons on board an aircraft shall obey all lawful commands given by the PIC or a crew member of the aircraft for the purpose of ensuring the safety and security of such aircraft, of persons or property carried therein or good order and discipline on board the aircraft.

Authorisation of personnel to taxi aeroplanes

- **91.01.3** No owner or operator of an aeroplane shall permit the taxiing of, and no person shall taxi, an aeroplane on the movement area of an aerodrome unless the person at the controls of the aeroplane
 - (a) is the holder of a valid pilot licence; or

- (b) has received instruction in the taxiing of an aeroplane from, and has been declared competent to taxi an aeroplane by, the holder of a flight instructor rating or, in the case of a foreign aeroplane, a person authorized by an appropriate authority; and
- (c) if the person uses a radio apparatus, such person is authorized to use the radio apparatus; and
- (d) is conversant with the aerodrome layout, routes, signs, markings, lighting, air traffic service signals and instructions, phraseology and procedures, if required, and is able to conform to the standards required for safe aeroplane movements at such aerodrome: Provided the aeroplane does not enter the manoeuvring area in a case where radio communication is mandatory.

Search and rescue information

91.01.4 The PIC or in the case of an aircraft engaged in commercial air transport operations, the operator, shall ensure that all essential information concerning the search and rescue services in the area over which it is intended that the aircraft will be flown, is available on board the aircraft.

Information on emergency and survival equipment

- **91.01.5** (1) The owner or operator of an aircraft shall have available for immediate communication to rescue coordination centres, a list containing information regarding the emergency and survival equipment carried on board the aircraft.
- (2) The minimum information to be contained in the list referred to in sub-regulation (1) is prescribed in Document SA-CATS 91.

Method of carriage of persons

- **91.01.6** No person shall be in any part of an aircraft in flight which is not a part designed for the accommodation of persons, unless temporary permission has been granted by the PIC to access such part of the aircraft
 - (a) for the purpose of taking action necessary for the safety of such aircraft or of any person, animal or goods therein; and
 - (b) in which cargo or stores are carried, being a part which is designed to enable a person to have access thereto while such aircraft is in flight.

Admission to flight deck

- **91.01.7** (1) No person other than the assigned flight deck crew shall be carried on the flight deck of a South African registered aircraft except with the permission of the PIC.
- (2) The admission of any person to the flight deck shall not interfere with the operation of the aircraft.
- (3) Any person carried on the flight deck shall be made familiar with the applicable safety equipment and pertinent operational procedures.

Unauthorised carriage

91.01.8 No person shall conceal himself, herself or cargo on board an aircraft.

Portable electronic devices

- **91.01.9** (1) Subject to the provisions of sub-regulation (2), no owner, operator or PIC of an aircraft or person shall permit the operation of, or operate on board the aircraft during flight time, any portable electronic device which may adversely affect the performance of the systems and equipment of the aircraft.
 - (2) The provisions of sub-regulation (1) does not apply to –
 - (a) a heart pacemaker;
 - (b) a hearing aid;
 - (c) a portable voice recorder;
 - (d) an electric shaver;
 - (e) portable equipment used to sustain life or similar equipment with the ability to generate an electrical charge for the purpose of pacing or resuscitation; or
 - (f) any other portable electronic device, the operation of which
 - (i) in the case of an aircraft engaged in a commercial air transport operation, the operator; or
 - (ii) in the case of an aircraft engaged in an operation other than a commercial air transport operation, the PIC,

has determined will not cause interference with the systems and equipment of the aircraft in which it is to be used.

(3) A portable electronic device referred to in sub-regulation (2)(c), (d) or (f) shall not be used by any person during the critical phases of flight.

Endangering safety

- **91.01.10** (1) No person shall, through any act or omission
 - (a) endanger the safety of an aircraft or person therein; or
 - (b) cause or permit an aircraft to endanger the safety of any person or property.
- (2) No person shall cause, by any means, a beam of light or other energy source, either visible or not, to be emitted towards any aircraft or air traffic control tower or any person therein such that there would be the potential for causing blindness or otherwise adversely affecting the ability of such person to safely carry out his or her duties.

Preservation of documents and records

91.01.11 The owner or operator of an aircraft who is required to retain any of the documents and records for the specified period referred to in Subpart 3, shall retain such documents for

such specified period irrespective of the fact that such owner or operator, before the expiry of such period, ceases to be the owner or operator of the aircraft.

Use of time

- **91.01.12** (1) For the purposes of reporting and recording time, Coordinated Universal Time (UTC) shall be used and shall be expressed in hours and minutes and, when required, seconds of the 24-hour day beginning at midnight.
- (2) A time check shall be obtained from an air traffic services unit, if possible, prior to operating a controlled flight and at such other times during the flight as may be necessary.
- (3) Wherever time is utilized in the application of data link communications, it shall be accurate to within 1 second of UTC.

Additional flight crew member equipment

91.01.13 A flight crew member assessed as fit to exercise the privileges of a licence, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.

Carriage of dangerous goods

91.01.14 The owner or operator of an aircraft shall not carry dangerous goods during flight time unless such goods are carried in accordance with the provisions of Part 92.

Passenger intoxication and unruly behaviour

- **91.01.15** (1) No person may board an aircraft while under the influence of alcohol or any psychoactive substance such that the safety of the aircraft or its occupants is, or is likely to be, endangered.
- (2) No person may consume alcohol or any psychoactive substance while on board an aircraft if, as a result of such consumption, the effects are, or are likely to, endanger the safety of the aircraft or its occupants.
- (3) No person may act in any manner that will, or is likely to, endanger the aircraft or its occupants.

Psychoactive substances

- **91.01.16** (1) Subject to sub-regulation (2), no person shall act in the capacity of any crew member, ground support, servicing or maintenance personnel, or perform any function or participate in any decision-making process that could affect aviation safety, where such person is, or is likely to be impaired by any psychoactive substance.
- (2) Where a medication that may be considered to be a psychoactive substance has been prescribed by a medical doctor, the duties in sub-regulation (1) may be undertaken provided an aviation medical examiner so designated in terms of Part 67 certifies what duties may be safely accomplished while taking such medication.

(3) A person who has been prescribed medication that may adversely affect performance or is otherwise of the opinion that his or her performance may be impaired through the use of medication or combinations of medication shall so inform the operator.

SUBPART 2: CREW

Crew composition and qualifications

- **91.02.1** (1) The number and composition of the flight crew shall not be less than the number and composition specified in the AFM referred to in regulation 91.03.2 or any other document defining the certification of the aircraft.
- (2) In the case of aircraft originally certified with a passenger seating capacity greater than 19 and not involved in commercial air transport operations, the Director may require the inclusion of cabin crew members for the safe operation of the aircraft. The complement, training and checking requirements of such crew members are prescribed in Document SA-CATS 91.
 - (3) The flight crew members and, if applicable, the cabin crew members, shall –
 - (a) be competent and qualified to perform the duties assigned to them;
 - (b) hold the appropriate valid crew licences, ratings and certificates; and
 - (c) have the ability to speak and understand the language used for aeronautical radiotelephony communications for the routes being flown.
- (4) The flight crew shall include at least one flight crew member who holds a valid radiotelephony operator licence or an equivalent document issued by an appropriate authority, authorising such member to operate the type of radio transmitting equipment to be used.
- (5) In the case of a multi-pilot crew, the owner or operator shall designate one pilot among the flight crew as PIC of the aircraft and the PIC may delegate the conduct of the flight to another suitably qualified pilot.
- (6) The owner or operator shall ensure that each flight and cabin crew member meets the requirements of sub-regulation (3).
- (7) Where the Director has determined the need for cabin crew members as prescribed in sub-regulation (2), the owner or operator of that aircraft shall
 - (a) ensure each cabin crew member is seated and secured in the seat prescribed by regulation 91.04.14(2) during take-off, landing or as otherwise directed by the PIC; and
 - (b) ensure each cabin crew member receives training prior to his or her first flight in that aircraft and annual recurrent training thereafter.

Crew member emergency duties

91.02.2 (1) The owner or operator and, where appropriate, the PIC of a multi-crew aircraft shall assign to each crew member concerned, the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.

(2) The functions referred to in sub-regulation (1) shall be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration the possible incapacitation of individual crew members.

Crew member responsibilities

- **91.02.3** (1) No person shall act as a crew member of an aircraft
 - (a) whilst using any psychoactive substance which may affect his or her faculties in any manner that may jeopardize safety;
 - (b) if the crew member knows or suspects that he or she is suffering from or, having due regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue to such an extent that it may endanger the safety of the aircraft or its occupants; or
 - (c) if the crew member is in any doubt of being able to accomplish his or her assigned duties on board the aircraft.
 - (2) No crew member shall –
 - (a) consume any alcohol less than 8 hours prior to commencing standby for operational duty or commencing operational duty, which operational duty shall be deemed to commence at the specified reporting time, if applicable;
 - (b) commence an operational duty period while the concentration of alcohol in his or her blood, is more than 0,02 gram per 100 millilitres; or
 - (c) consume alcohol during flight duty or whilst on standby, or within eight hours after an accident or reportable incident involving the aircraft, unless the accident or incident was not related to his or her duties.
- (3) No person shall act as a flight crew member of an aircraft if, prior to each flight, the expected flight time exceeds, or is likely to exceed, the permissible aggregate of
 - (a) for all flying
 - (i) for pilots not subject to an approved flight time and duty period scheme, 10 hours within a 24 hour period;
 - (ii) 400 hours, during the preceding 90 days;
 - (iii) 700 hours, during the preceding six months; or
 - (iv) 1000 hours, during the preceding 12 months;
 - (b) in the case of flight instructors conducting *ab initio* or any training towards an initial rating or licence, six hours within one calendar day: Provided that, for the purposes of computing flight time in meeting the limitation referred to in paragraph (a)(i), each flight hour spent in such training shall be deemed to be one and one-half (1½) hours flight time:
 - (c) as part of a multi-pilot crew for a flight to be undertaken wholly or partly under IFR
 - (i) 120 hours, during the preceding 30 days; or

- (ii) 300 hours, during the preceding 90 days; or
- (d) as the sole pilot of an aircraft for a flight to be undertaken wholly or partly under IFR,100 hours during the preceding 30 days.
- (4) No person shall act as a cabin crew member of an aircraft for which the Director has determined the need for cabin crew members, as prescribed in regulation 91.02.1(2), if prior to each flight the expected flight time exceeds, or is likely to exceed, the permissible aggregate of
 - (a) 400 hours, during the preceding 90 days;
 - (b) 700 hours, during the preceding six months; or
 - (c) 1000 hours, during the preceding 12 months.

Recency

- **91.02.4** (1) A pilot shall not act as PIC of an aircraft, or second-in-command (SIC) of an aircraft required to be crewed by more than one pilot, carrying passengers by day, unless such pilot has personally, within the 90 days immediately preceding the flight, carried out either by day or by night at least three take-offs and three landings in the same class or, if a type-rating is required, type or variant of aeroplane, and in the case of a helicopter three circuits including three take-offs and three landings in the same type of helicopter as that in which such flight is to be undertaken. The landings required by this sub-regulation may be completed in a FSTD approved for the purpose. In the case of a tail-wheel aeroplane, each landing shall be carried out to a full stop.
- (2) A pilot shall not act as PIC of an aircraft, or SIC of an aircraft required to be crewed by more than one pilot, carrying passengers by night, unless the pilot has personally, within the 90 days immediately preceding the flight, carried out at least three take-offs and three landings by night in the same class or, if a type-rating is required, type or variant of aeroplane, and in the case of a helicopter three circuits including three take-offs and three landings in the same type of helicopter as that in which such flight is to be undertaken. The landings required by this sub-regulation may be completed in a FSTD approved for the purpose. In the case of a tail-wheel aeroplane, each landing shall be to a full stop.
- (3) Where the take-off and landing requirement referred to in sub-regulations (1) and (2) have been satisfied in a multi-engine aircraft, the requirement shall be deemed to have been met in respect of single-engine aircraft as well.
- (4) A pilot shall not act as PIC or SIC of an aircraft on an instrument approach to an aerodrome in IMC unless the pilot has, within the 90 days immediately preceding such approach procedure or procedures established by the Director or an appropriate authority
 - (a) executed at least two approaches in an aircraft or a FSTD approved for the purpose or a combination of aircraft and FSTD approved for the purpose, either under actual or simulated conditions, with reference to flight instruments only; or
 - (b) undergone the appropriate skill test as prescribed in regulation 61.15 of Part 61 of these Regulations.

Crew members at duty stations

- 91.02.5 (1) In the case of a multi-crew aircraft
 - (a) each crew member shall be at his or her assigned station or seat, properly secured by all seat belts and shoulder harnesses provided, during take-off and landing and whenever deemed necessary by the PIC in the interests of aviation safety: Provided that the shoulder harness of a flight crew member not occupying a pilot seat may be unfastened if it interferes with the performance of his or her duties, but the seat belt must remain fastened;
 - (b) each crew member shall keep his or her seat belt fastened while at his or her assigned station, during phases of the flight, other than the phases referred to in paragraph (a);
 - (c) each flight crew member required to be on flight deck duty, shall be at his or her assigned station, during take-off and landing;
 - (d) all flight crew members on flight deck duty shall remain at their assigned stations during all phases of the flight other than the phases referred to in subparagraph (c): Provided that
 - a flight crew member may leave his or her assigned station, in the course of the performance of his or her duties with regard to the operation of the aircraft or for physiological needs; and
 - (ii) at least one suitably qualified pilot remains at the controls of the aircraft at all times; and
 - (e) the PIC or, where applicable, the operator shall ensure that flight and, if applicable, cabin crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the aircraft.
- (2) In the case of a single-pilot aircraft, the PIC shall, during all phases of the flight, remain at the controls of the aircraft.

Laws, regulations and procedures

- **91.02.6** (1) The PIC of an aircraft shall be familiar with the laws, regulations and procedures pertinent to the performance of his or her duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto and shall ensure that other members of the flight crew are familiar with such laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aircraft.
- (2) Subject to sub-regulation (3), the PIC of an aircraft shall comply with the regulations contained in this Part unless they conflict with the rules published by the State having jurisdiction over the territory over flown: Provided that if any regulation of this Part is more restrictive and may be followed without violating the rules of that State, it shall be complied with.
- (3) In an emergency situation which endangers, or is likely to endanger the aircraft, persons on board such aircraft, or persons or property on the surface, the PIC shall take any action which he or she considers necessary under the circumstances.

- (4) If a PIC deviates from any law, regulation or operational procedure in an emergency situation referred to in sub-regulation (3), he or she shall notify the appropriate authority of the State within or over the territory of which the deviation occurs, of such deviation without delay.
- (5) If the appropriate authority of the State within or over the territory of which the deviation occurs, requests the PIC to submit a report on such deviation, the PIC shall submit the report containing full details of the deviation
 - (a) to such appropriate authority, within the period specified by such appropriate authority,; and
 - (b) if the deviation occurred in a foreign State, to the Director, within 10 days from the date on which such report is requested by the appropriate authority of such State,.

Duties of PIC regarding flight preparation

- **91.02.7** (1) The PIC of an aircraft shall not commence a flight unless he or she is satisfied that
 - (a) the aircraft is airworthy;
 - (b) the instruments and navigation, communication and other equipment required for the particular type of operation to be undertaken, are installed and are serviceable and functioning correctly, except as provided for in the MEL, if any;
 - (c) the aircraft has been released to service in accordance with Part 43;
 - (d) the mass of the aircraft at any time does not exceed the MCM calculated from the performance information provided in the AFM referred to in regulation 91.03.2, in terms of which the operating limitations referred to in Subpart 9 are complied with;
 - (e) the load carried by the aircraft is properly secured, fit to be conveyed in accordance with Part 92 and is so distributed that the centre of gravity is within the limits prescribed in the AFM referred to in regulation 91.03.2;
 - (f) an ATS flight plan, referred to in regulation 91.03.4, has been properly completed and filed with the appropriate ATSU, if such flight plan is required in terms of regulation 91.03.4;
 - (g) all the documents and forms required to be carried on board are carried as specified in regulation 91.03.1;
 - (h) a check has been completed indicating that the operating limitations referred to in Subpart 8 will not be exceeded;
 - (i) the search and rescue information, referred to in regulation 91.01.4, is available on board;
 - the requirements in respect of fuel, oil, oxygen, weather, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes for the route being flown and any likely alternatives, whether flown under instrument or VFR, are complied with;

- (k) the aerodrome operating minima are not less than the operating minima of the aerodrome being operated to or from, established by the appropriate authority of the State in which the aerodrome is located, unless such appropriate authority approves lower aerodrome operating minima;
- (I) current and suitable IFR or VFR, as applicable, charts and related publications required to
 - (i) depart the place of origin;
 - (ii) operate on the route to the destination, or other route that a flight could reasonably be expected to be diverted to; and
 - (iii) arrive at the destination or any alternate,

are carried on board;

- (m) the external surfaces are checked prior to take-off for any deposit which might adversely affect the performance or controllability of the aircraft, unless otherwise permitted in the AFM referred to in regulation 91.03.2, and if such deposit is found, to have it removed;
- (n) according to the information available to him or her -
 - (i) in respect of an aeroplane, the condition of the runway intended to be used will not prevent a safe take-off at departure or a safe landing at the destination aerodrome or alternate aerodrome, as applicable; and
 - (ii) the weather at the departure and arrival aerodromes and *en route*, including any possible alternate aerodromes or routes, will not preclude safe completion of the flight;
- (o) the RVR or visibility in the take-off direction of the aircraft is equal to, or better than, the applicable minimum;
- (p) the flight crew members are properly qualified for the specific operation to be undertaken, except that for commercial air operations, the air operator shall ensure that the flight crew are properly qualified;
- (q) an adequate and suitable aerodrome is available for take-off, *en route* and destination, should it become inadvisable to continue to or land at the destination aerodrome; and
- (r) if flight in RVSM airspace is contemplated -
 - (i) the aircraft has been approved for RVSM operations;
 - (ii) the crew has been trained and is otherwise qualified for the flight;
 - (iii) the minimum required equipment pertaining to height-keeping and alerting systems is installed and serviceable; and
 - (iv) no airframe or operating restrictions prevent operation in the particular RVSM airspace.
- (2) The PIC of an aircraft shall –

- (a) not commence a flight unless he or she has ascertained through the relevant NOTAM), AIC, IAIP or IAIP Supplement that the aerodromes, navigation aids and communication facilities are adequate for the manner in which the flight is to be conducted;
- (b) prior to take-off from an aerodrome at which an ATSU is in operation, determine through the aeronautical information services available from the unit or any other reliable source, that the unserviceability of any aerodrome, navigation aids or communication facilities required for such flight, will not prejudice the safe conduct of the flight; and
- (c) advise an ATSU, as soon as it is practical to do so, of any inadequate facilities encountered in the course of operations.
- (3) Where a load and trim sheet is required in terms of these regulations, the load and trim sheet shall be acceptable to and countersigned by the PIC before a flight commences: Provided that if the load and trim sheet is submitted to the PIC by electronic data transfer, commencement of the flight shall be deemed to be the acceptance thereof by such PIC.

Duties of PIC regarding flight operations

91.02.8 (1) The PIC of an aircraft shall, whether manipulating the controls or not, be responsible for –

- (a) the operation, safety and security of the aircraft, crew members, passengers and cargo in accordance with these Regulations while he or she is in command;
- (b) operational control of the aircraft unless otherwise provided for in terms of Part 93, 121, 127 or 135 under an approved operational control system;
- (c) the conduct of crew members and passengers carried; and
- (d) the maintenance of discipline by all persons on board.
- (2) The PIC of the aircraft shall have the authority-
- (a) to give such commands he or she deems necessary in the interest of the safety of the aircraft, persons or property; and
- (b) to disembark any person or cargo which in his or her opinion, represents a potential hazard to the safety of the aircraft, persons or property.
- (3) The PIC of the aircraft shall ensure that all passengers are informed as to –
- (a) when and how oxygen equipment is to be used, if the carriage of oxygen is required;
- (b) the location and use of life jackets or equivalent individual flotation devices, where the carriage thereof is required;
- (c) the location and method of opening emergency exits;
- (d) when seat belts are to be fastened;
- (e) when smoking is prohibited;
- (f) when portable electronic devices may be used;

- (g) the existence and location of the passenger safety features card, if carried on board; and
- (h) before take-off, the location and general manner of use of the relevant emergency equipment carried for collective use and, when an emergency arises, instruct the passengers to take such emergency action as may be appropriate.
- (4) The PIC of an aircraft shall -
- (a) ensure that the pre-flight inspection has been carried out, and that the checklists, and where applicable, the flight deck procedures and other instructions regarding the operation of the aircraft, the limitations contained in the AFM referred to in regulation 91.03.2 or equivalent certification document, are fully complied with at the appropriate times during a flight;
- (b) decide whether or not to accept an aircraft with unserviceabilities allowed by the CDL or MEL, where applicable;
- (c) determine that aircraft performance will permit the take-off and departure to be carried out safely;
- (d) ensure that, before take-off and landing and whenever, by reason of turbulence, any emergency occurring during a flight or whenever deemed necessary in the interest of aviation safety the precaution is considered necessary, the PIC shall ensure that
 - (i) all persons on board the aircraft are secured in their seats by means of the seat belts or shoulder harnesses provided; and
 - (ii) equipment and baggage are properly secured and all exit and escape paths are unobstructed.
- (e) when replanning, whilst in flight, to proceed along a route or to a destination other than the route or destination originally planned, shall amend the OFP, if such a plan was required in terms of regulation 91.02.7(1)(f), and notify the nearest ATSU of such change;
- (f) not continue towards the aerodrome of intended landing unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at least one destination alternate aerodrome, in compliance with the operating minima established in accordance with regulation 91.07.5;
- (g) report any accident or incident involving the aircraft in accordance with Part 12, unless the PIC is incapacitated or an operator has established another means of reporting accidents or incidents, in which case the operator shall initiate the report;
- (h) report any dangerous goods accident or incident involving the aircraft in accordance with Part 92;
- (i) if the aircraft is endangered in flight by a near collision with any other aircraft or object, faulty air traffic procedure or lack of compliance with applicable procedures by an ATSU or a flight crew member or a failure of ATS facilities, submit an ATS incident report as prescribed by regulation 12.02.2;

- (j) record any technical defect and the exceeding of any technical limitation which occurred while he or she was responsible for the flight, in the flight folio;
- (k) if a potentially hazardous condition such as bird accumulation, an irregularity in a ground or navigation facility, meteorological phenomena, a volcanic ash cloud or a greater than normal radiation level is observed during flight, notify an ATSU as soon as possible;
- (I) if the aircraft is equipped with an ELT, prior to engine shut-down at the end of each flight as part of the post-flight checks, tune the VHF receiver to 121,5 MHz to listen for ELT
 - activation. If the ELT has been activated inadvertently as the result of a hard landing or for other reasons, this shall be reported—
 - (i) immediately through the nearest ATSU to the rescue coordination centre; and
 - (ii) in the appropriate flight log as maintenance may be required before it is returned to service; and
- (m) report any occurrence of height keeping errors encountered in a RVSM environment, as prescribed in paragraph (7) of section 8 of technical standard 91.07.31 of Document SA-CATS 91.
- (5) The PIC of the aircraft shall ensure that -
- (a) breathing oxygen is available to crew members and passengers if flights in a nonpressurised aircraft are contemplated above 10 000 feet and up to 12 000 feet in excess of 120 minutes intended flight time, or above 12 000 feet; and
- (b) breathing oxygen is carried in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of faculties of crew members or harmfully affect passengers.
- (6) The PIC of the aircraft shall not -
- (a) require a crew member to perform any duties during a critical phase of the flight, except those duties required for the safe operation of the aircraft;
- (b) permit any activity during a critical phase of the flight which could distract any crew member from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties; and
- (c) commence a flight in the event a crew member is incapacitated by any cause such as injury, fatigue, sickness or the effects of any psychoactive substance or continue a flight beyond the nearest suitable aerodrome in the event of a flight crew member becoming unable to perform any essential duties as a result of fatigue, sickness or lack of oxygen.
- (7) The PIC of an aircraft which is being subjected to unlawful interference –
- (a) shall notify the appropriate ATSU of this fact, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATSU to give priority to the aircraft and to minimize conflict with other aircraft;

- (b) shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate authority unless considerations aboard the aircraft dictate otherwise; and
- (c) immediately following the incident unless unable, in which case the owner or operator of the aircraft shall report the act of unlawful interference with the operation of the aircraft or the authority of the PIC
 - (i) if the act of unlawful interference occurs within the Republic, to the Director; or
 - (ii) if the act of unlawful interference occurs within or over the territory of a foreign State, to the appropriate authority of the State and the Director.
- (8) The PIC of an aircraft, that is equipped with a flight deck door, shall ensure that at all times from the moment the passenger entry doors are closed in preparation for departure until they are opened on arrival, that the flight deck door is closed and locked from within the flight deck.

SUBPART 3: DOCUMENTATION AND RECORDS

Documents to be carried on board

- **91.03.1** The owner or operator of an aircraft shall ensure that the following documents, or certified true copies thereof, are carried on board the aircraft on each individual flight
 - (a) If the aircraft is engaged in an international flight
 - (i) the certificate of registration;
 - (ii) the certificate of airworthiness or, for non-type certificated aircraft, an authority to fly;
 - (iii) the appropriate licence and medical certificate of each crew member;
 - (iv) the general declaration;
 - (v) the aircraft radio station licence:
 - (vi) if passengers are carried, the passenger manifest, unless the information is included in the general declaration referred to in subparagraph (iv);
 - (vii) if cargo is carried, a manifest and detailed declaration of the cargo;
 - (viii) the certificate of release to service:
 - (ix) the navigation log when a navigator is carried;
 - (x) the AFM, referred to in regulation 91.03.2, or an equivalent document, which document shall include the statements referred to in technical standard 91.07.31 5(5)(a) of Document SA-CATS 91, if flight in RVSM airspace is contemplated;
 - (xi) the mass and balance report;
 - (xii) the flight folio;

- (xiii) the MEL, if applicable;
- (xiv) the noise certificate, if such certificate has been issued for the type of aircraft; and
- (xv) a list of visual signals and procedures for use by intercepting and intercepted aircraft;
- (xvi) if a flight in RVSM airspace is contemplated
 - (aa) a valid RVSM licence endorsement issued by the Director; and
 - (bb) if applicable, a valid RVSM operational approval for the particular RVSM airspace; and
- (xvii) where applicable, a licence to operate air services, FOP or equivalent document giving authority for the flight.
- (b) if the aircraft is engaged in a domestic flight -
 - (i) the certificate of registration;
 - (ii) the certificate of airworthiness;
 - (iii) the appropriate licence and medical certificate of each crew member;
 - (iv) the aircraft radio station licence;
 - (v) the certificate of release to service;
 - (vi) the AFM referred to in regulation 91.03.2 or an equivalent document;
 - (vii) the mass and balance report;
 - (viii) the flight folio;
 - (ix) the MEL, if applicable;
 - (x) the noise certificate, if such certificate has been issued for the type of aircraft;
 - (xi) the list of visual signals and procedures for use by intercepting and intercepted aircraft; and
 - (xii) the licence to operate the service, if required

Aircraft flight manual

- **91.03.2** (1) The owner or operator of an aircraft shall keep an approved AFM for each aircraft of which he or she is the owner or operator and shall keep such manual current with amendments and implement changes issued by an appropriate authority.
- (2) The flight crew members of the aircraft shall, on each flight, operate such aircraft in accordance with the AFM, unless an unforeseen emergency dictates otherwise.

Aircraft checklist

- **91.03.3** (1) The owner or operator of an aircraft shall establish and make available to the flight crew and other personnel in his or her employ needing the information, a checklist system for the aircraft, to be used by such flight crew and other personnel for all phases of the operation under normal, abnormal and emergency conditions.
- (2) The PIC shall ensure the checklists used on board the aircraft are complied with and utilised having due regard to human factors principles.
- (3) The checklists required in terms of sub-regulation (1) shall be designed having due regard to human factors principles as prescribed in Document SA-CATS 91.

Air traffic service flight plan and associated procedures

- **91.03.4** (1) The owner or operator of an aircraft shall ensure that an ATS flight plan is completed if required in terms of sub-regulation (4).
- (2) The items to be contained in the ATS flight plan shall be as prescribed Document SA-CATS 91.
- (3) The ATS flight plan shall be filed with the appropriate ATSU unless other arrangements have been made for submission of repetitive flight plans and such unit shall be responsible for transmitting such ATS flight plan to all ATSUs concerned with the flight.
 - (4) The ATS flight plan shall be filed in respect of –
 - (a) all flights to be conducted in controlled or advisory airspace: Provided that this requirement shall not apply in respect of
 - (i) a local flight;
 - (ii) a flight crossing an airway or advisory routes at right angles; or
 - (iii) a VFR flight entering or departing from an aerodrome traffic zone or control zone, from or to an unmanned aerodrome and where no other controlled or advisory airspace will be entered during the flight;
 - (b) an international flight;
 - (c) all flights undertaken in terms of a Class I or Class II licence issued in terms of the Air Services Licensing Act, No. 115 of 1990 or the International Air Services Act, No. 60 of 1993;
 - (d) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate the provision of flight information, alerting and search and rescue services; and
 - (e) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate coordination with appropriate military units or with ATSUs in adjacent States in order to avoid the possible need for interception for the purpose of identification.
- (5) An ATSU may instruct a flight for which an ATS flight plan is required in terms of subregulation (4) and for which an ATS flight plan has not been filed, to clear or to remain clear of

controlled airspace, and not to cross the border of the Republic or to enter its airspace until such time as the required ATS flight plan has been filed.

- (6) Unless otherwise authorized by the responsible ATSU, an ATS flight plan for a flight to be conducted in controlled or advisory airspace, shall be filed
 - (a) for domestic flights, at least 30 minutes before departure;
 - (b) for international flights, at least 60 minutes before departure; or
 - (c) if filed during flight while outside controlled or advisory airspace for a flight to be conducted in such airspace, it shall be filed with the responsible ATSU at least 10 minutes before the aircraft is estimated to reach the intended point of entry into the controlled or advisory airspace or the point of crossing the airway or advisory route.
- (7) The PIC of an aircraft operating an IFR or controlled VFR flight shall ensure that all changes which become applicable to an ATS flight plan before departure or in flight are reported, as soon as practicable, to the responsible ATSU. For other VFR flights, changes regarding fuel endurance or total number of persons carried on board shall, as a minimum, be reported.
- (8) If an ATS flight plan has been filed with an ATSU prior to departure, and is not activated with an ATSU within one hour of original estimated time of departure or amended estimated time of departure, the ATS flight plan shall be regarded as cancelled and a new ATS flight plan shall be filed.
- (9) Where an ATSU is not in operation at the aerodrome of intended landing, a report of arrival as prescribed in Document SA-CATS 91 shall be submitted to an ATSU, by the quickest means of communication available, immediately after landing, in respect of a flight for which an ATS flight plan was submitted and not as yet closed or for which search and rescue notification was requested and designated with a particular ATSU.
- (10) When communication facilities at the arrival aerodrome are inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the PIC shall, prior to landing the aircraft or immediately thereafter, if practicable, transmit to the appropriate ATSU, a message comparable to an arrival report, in respect of a flight for which an ATS flight plan was submitted and not as yet closed or for which a search and rescue notification was requested with a nominated ATSU.
- (11) Subject to the provisions of sub-regulation (12), the PIC shall ensure that the aircraft adheres to the current ATS flight plan filed for a controlled flight, unless a request for a change has been made and accepted by the ATSU responsible for the controlled airspace in which the aircraft is operating, or unless an emergency situation arises which necessitates immediate action, in which event the responsible ATSU shall, as soon as circumstances permit, be notified of the action taken and that such action was taken under emergency authority.
- (12) In the event of a controlled flight inadvertently deviating from its current ATS flight plan, the following action shall be taken
 - (a) if the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable;

- (b) if the average true airspeed at cruising level between reporting points varies, or is expected to vary, from that given in an ATS flight plan by approximately five per cent of the true airspeed, the responsible ATSU shall be so informed;
- (c) if the estimated time at the next applicable reporting point, flight information regional boundary, or aerodrome of intended landing, whichever comes first, is found to be in error in excess of three minutes from that notified to the responsible ATSU, a revised estimated time shall be notified to such ATSU as soon as possible; or
- (d) if the aircraft deviates from its altitude, action shall be taken forthwith to correct the altitude of the aircraft.
- (13) When an automatic dependent surveillance (ADS) agreement is in place, the ATSU shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.
- (14) If prior to departure it is anticipated that, subject to a reclearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate ATSUs shall be so notified by the insertion in the flight plan of information concerning the revised route, where known, and the revised destination. The revised destination shall be subject to the fuel and oil provisions of regulation 91.07.12.

Flight folio

- **91.03.5** (1) The owner or operator of a South African registered aircraft shall ensure that the aircraft carries a flight folio or any other similar document which meets the requirements of and contains the information as prescribed in Document SA-CATS 91, at all times.
 - (2) The flight folio shall be kept up-to-date and maintained in a legible manner by the PIC.
- (3) All entries shall be made immediately upon completion of the occurrence to which they refer.
- (4) In the case of maintenance being undertaken on the aircraft, the entry shall be certified by the person taking responsibility for the maintenance performed.
- (5) The owner or operator shall retain the flight folio for a period of five years calculated from the date of the last entry therein.

Fuel record

- **91.03.6** (1) The owner of operator of an aircraft shall maintain fuel records for each flight undertaken by the aircraft under the control of such owner or operator.
- (2) The PIC of the aircraft shall enter the fuel and oil records referred to in sub-regulation (1) in the flight folio.

Certificate of release to service

- **91.03.7** (1) No owner or operator of an aircraft shall operate
 - (a) a South African registered aircraft without holding a valid certificate of release to service signed by the holder of an appropriately rated AME licence or AMO approval; or

- (b) a foreign aircraft without holding a valid certificate, equivalent to the certificate referred to in paragraph (a), issued by an appropriate authority.
- (2) The owner or operator shall –
- (a) ensure that one copy of the certificate of release to service or equivalent certificate is carried on board the aircraft to which it relates and, in the case of a South African registered aircraft, a second copy shall be filed at the normal station of the aircraft; and
- (b) retain the certificate of release to service for a period of 12 months calculated from the date of issue of such certificate of release to service.

Flight recorder records

- 91.03.8 (1) The owner or operator of an aircraft on which a flight recorder is carried, shall
 - (a) in the case of an accident or incident involving such aircraft, preserve the original recording, as retained by the flight recorder, for a period of not less than 60 days calculated from the date of the accident or incident, or until permission for disposal of such recording has been given by the investigator-in-charge or an appropriate authority, whichever is the latter date; and
 - (b) when the Director so directs, preserve the original recording, as retained by the flight recorder, for a specified period calculated from the date of such direction.
- (2) If an aircraft is required under this Part to be fitted with a FDR, the owner or operator of the aircraft shall
 - (a) have the recording for the period of operating time as required by sub-regulations (1)(a) and (b): Provided that for the purpose of testing and maintaining a FDR one hour of the oldest recorded material at the time of testing may be erased;
 - (b) keep a recording of at least one representative flight made within the preceding 12 months which includes a take-off, climb, cruise, descent, approach and landing, together with a means of identifying the recording with the flight to which it relates; and
 - (c) keep a document which represents the information necessary to retrieve and convert the stored data into engineering units.
- (3) The owner or operator of an aircraft on which a flight recorder is carried shall, within a reasonable time after being requested to do so by the Director or an appropriate authority, produce any recording made by such flight recorder which is available or has been preserved.
- (4) A CVR recording may be used for purposes other than for the investigation of an accident or incident only with the consent of all the flight crew members concerned.
- (5) The FDR recordings may be used for purposes other than the investigation of an accident or incident which is subject to mandatory reporting, only when such recordings are
 - (a) used by the owner or operator for airworthiness or maintenance purposes only;
 - (b) de-identified; or
 - (c) disclosed under secure procedures.

Logbooks

- **91.03.9** (1) The following logbooks shall be kept in respect of South African registered aircraft and in respect of other specified equipment for the purpose of recording therein the maintenance history of the equipment to which each relates
 - (a) an aircraft logbook for each aircraft;
 - (b) an engine logbook for each aircraft engine; and
 - (c) a propeller logbook for each propeller.
- (2) The provisions of sub-regulation (1) shall not apply to aircraft which do not qualify for the issue of a certificate of airworthiness.
- (3) Logbooks to be kept in terms of sub-regulation (1) shall conform to such format as the Director may from time to time prescribe in an AIC.
 - (4) (a) Logbooks should preferably be kept at the aircraft's base of operation.
- (b) Details in respect of maintenance carried out while away from base shall be transferred to the appropriate logbook or logbooks within 48 hours after the return of the aircraft to its base of operation or entered within 48 hours on completion of any maintenance performed on the aircraft or installed equipment at a base other than its base of operation.
- (5) All logbooks to be kept and maintained in terms of the preceding sub-regulations shall on demand be made available at all times for inspection by an authorised officer.
- (6) The logbooks required to be kept in accordance with this Part shall be preserved in a safe place at all times and for a period of 6 (six) months after the date of destruction of the airframe, engine or propeller for which they were kept.
- (7) Logbooks shall not be carried in the aircraft to which they relate unless the aircraft is flown to a place where the logbooks are required for compliance with maintenance to the aircraft. Where a logbook is carried on board an aircraft, a suitable record of the last inspection performed shall be maintained at the base of operation of the aircraft.
- (8) Entries in the logbooks required to be kept in accordance with this Part shall be made and signed by the holder of an appropriate licence or by a person approved by the Director, except that matters that could not have come to the notice of the holder of an appropriate licence holder or an approved person, shall be entered and signed by the PIC.
- (9) Any record kept for the purpose of compiling a logbook or any other technical data relating to the airworthiness of an aircraft or component shall be produced when called for in the event of any inspection or investigation.
- (10) All entries made in logbooks shall furnish the information and particulars provided for in the relevant logbook.
- (11) When repairs to an aircraft, aircraft engine or component or fixed or removable equipment have been required in consequence either of damage caused by a forced landing or of defects which have occasioned a forced landing or any other incident, the entry or entries

made in the relevant logbook or books in respect of such repairs shall state that they have been so required and shall identify the forced landing or incident in question.

- (12) The logbooks referred to in this Part shall be kept up to date and maintained in ink in a legible manner and reasonable condition and in accordance with the "Instructions for use" in the relevant logbook.
- (13) In the event that required maintenance records have been lost or destroyed, alternative proof should be provided that the tasks in question have been performed.

SUBPART 4: INSTRUMENTS AND EQUIPMENT

Use and installation of instruments and equipment

- **91.04.1** (1) Instruments on an aircraft which are used by a pilot shall be arranged in such a manner that the pilot can see their indications readily from his or her station, with the minimum practicable deviation from the position and line of vision which he or she normally assumes when looking forward along the flight path.
- (2) If a single instrument or item of equipment in an aircraft is required to be operated by more than one pilot, such single instrument or item of equipment shall be installed in such a manner that it can be readily seen and operated from each pilot station.
- (3) An aircraft shall be equipped with means for indicating the adequacy of the power being supplied to the required flight instruments.
- (4) Placards and instrument markings, containing those operating limitations required by the type certificate or by regulation to be visible to the flight crew, shall be displayed in the aircraft.
- (5) An operator shall ensure that a flight does not commence unless the instruments and equipment required under the Regulations are functioning and are in a condition for safe operation of the kind being conducted, except as provided for in a MEL.
 - (6) The operator shall not be required to obtain approval for the –
 - (a) fuses referred to in regulation 91.04.2;
 - (b) intrinsically safe electric torches referred to in regulation 91.04.3(1)(d);
 - (c) accurate time piece referred to in regulations 91.04.4 and 91.04.5;
 - (d) first aid equipment referred to in regulation 91.04.16;
 - (e) megaphones referred to in regulation 91.04.24; and
 - (f) survival equipment referred to in regulation 91.04.29.

Circuit protection devices

91.04.2 (1) No owner or operator of an aircraft in which fuses are used, shall operate the aircraft unless there are spare fuses available for use in flight equal to at least ten per cent or three, whichever is the greater, of the number of fuses of each rating required for complete circuit protection, which spare fuses shall be accessible to the flight crew during flight.

- (2) If the ability to reset a circuit breaker or replace a fuse is essential to safety in flight, such circuit breaker or fuse shall be located and identified in such a manner that it can be readily reset or replaced in flight.
- (3) No person shall deactivate a circuit breaker in flight other than in accordance with the aircraft flight manual referred to in regulation 91.03.2.

Aircraft operating lights

- **91.04.3** (1) No owner or operator of an aircraft shall operate such aircraft by night unless, in addition to the equipment specified in regulation 91.04.5(1), the aircraft is equipped with
 - (a) serviceable navigation lights;
 - (b) either -
 - (i) two serviceable landing lights; or
 - (ii) one single serviceable landing light housing with two separately energized filaments;
 - (c) a serviceable rotating beacon or strobe light; and
 - (d) a serviceable electrical torch for each required crew member, readily accessible to such crew member when seated at his or her designated station.
 - (2) Power supplied from the electrical system of the aircraft shall –
 - (a) provide adequate illumination for all instruments and equipment, used by the flight crew and essential for the safe operation of the aircraft; and
 - (b) be adequate to provide illumination in all passenger compartments, if any.
- (3) No owner or operator of a helicopter shall operate the helicopter by night unless such helicopter is equipped with
 - (a) in the case of a flight by night within 10 nautical miles, a light or lights providing adequate illumination both forward and downward to facilitate safe approaches, landings and take-offs; or
 - (b) in the case of a flight by night of more than 10 nautical miles, two landing lights or a single light having two separately energised filaments which are capable of providing adequate illumination both forward and downward to facilitate safe approaches, landings and take-offs.
- (4) No owner or operator of a seaplane or an amphibious aircraft shall operate the seaplane or amphibious aircraft unless it is equipped with
 - (a) the instruments and equipment referred to in sub-regulation (1), (2) or (3), as the case may be; and
 - (b) when operating on water by night, display lights to conform with the International Regulations for Prevention Collisions at Sea.

(5) The navigation lights to be displayed by aircraft by night, on the water or on the manoeuvring area of an aerodrome, shall be as prescribed in technical standard 91.06.10 of Document SA-CATS-OPS 91.

Flight, navigation and associated equipment for aircraft operated under VFR

- **91.04.4** No owner or operator of an aircraft shall operate the aircraft in accordance with VFR, unless such aircraft is equipped with the following functioning equipment
 - (a) a magnetic compass;
 - (b) an accurate time-piece showing the time in hours, minutes, and seconds;
 - (c) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (d) an airspeed indicator;
 - (e) if so required for use in designated airspace, a pressure-altitude reporting transponder, unless authorised by the responsible ATSU; and
 - (f) if to be operated by night, a chart holder in an easily readable position which can be illuminated.

Flight, navigation and associated equipment for aircraft operated under IFR

- **91.04.5** (1) No owner or operator of an aircraft shall operate the aircraft in accordance with IFR, unless such aircraft is equipped with functioning navigation equipment appropriate to the route to be flown and
 - (a) a magnetic compass;
 - (b) an accurate time-piece showing the time in hours, minutes and seconds;
 - (c) for large aeroplanes, two independent sensitive pressure altimeter systems with subscale settings, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight and for all other aircraft, one sensitive pressure altimeter with subscale settings, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
 - (e) a vertical-speed indicator;
 - (f) a stabilised direction indicator;
 - (g) a turn-and-bank indicator, or a turn co-ordinator incorporating a slip indicator;
 - (h) an attitude indicator and for large aeroplanes for which an individual certificate of airworthiness was first issued after 1 January 1975, an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude indicator, clearly visible to the PIC. The emergency power supply shall be automatically operative after the total

- failure of the main electrical generating system and clear indication shall be given on the instrument panel that the attitude indicator(s) is being operated by emergency power;
- (i) a means of indication, in the cockpit or in the flight deck, the outside air temperature in degrees Celsius;
- (j) a chart holder in an easily readable position which can be illuminated for operations by night;
- (k) a means of measuring and displaying whether the supply of power to the gyroscopic instruments is adequate; and
- (I) a pressure-altitude reporting transponder.
- (2) No owner or operator shall operate in RVSM airspace unless the aircraft is equipped as specified in technical standard 91.04.34 of Document SA-CATS 91.
- (3) No owner or operator of a large pressurised aeroplane shall operate the aeroplane when carrying passengers at night or under IMC unless it is equipped with operative weather-detecting equipment capable of detecting thunderstorms whenever the aeroplane is being operated in areas where such conditions may be expected to exist along the route.

Additional equipment for single-pilot operation under IMC or at night

- **91.04.6** (1) No owner or operator of an aircraft shall conduct single-pilot operations in an aircraft under IMC or at night unless such aircraft has been certificated for single-pilot operations and
 - (a) the single pilot flying is equipped with a headset with boom microphone or equivalent and has a transmit button positioned in such a way that it may be operated without the pilot having to remove his or her hands from the control wheel, joy stick or cyclic stick;
 - (b) the aircraft is equipped with a means of displaying charts that enables them to be readable in all ambient light conditions;
 - (c) if the aircraft is flown under IMC, such aircraft has been certificated for single pilot IFR operations and is equipped with a serviceable automatic flight control system with at least altitude hold and heading mode; or
 - (d) in the case of a helicopter, if it is flown at night under VMC, such helicopter is equipped with a serviceable automatic flight control system with at least altitude and heading mode or similar equipment: Provided that this requirement shall not apply to a helicopter operated in the circuit of the aerodrome of departure or over densely populated, welllighted areas in accordance with the provisions of regulation 91.06.32(2) but not higher than 3 500 feet above the prescribed minimum height.
- (2) Nothing in this regulation shall be construed as meaning that a flight under IFR or at night for the purpose of flight instruction conducted by an appropriately rated flight instructor would be a single-pilot operation, or that such a training flight, if conducted in terms of any of the Parts 93, 121, 127 or 135 would be required to be operated by two qualified pilots.

Mach number indicator

91.04.7 No owner or operator of an aircraft with speed limitations expressed in terms of Mach number shall operate the aircraft unless such aircraft is equipped with a Mach number indicator.

Radio altimeter

91.04.8 No owner or operator of a helicopter shall operate the helicopter on a flight over water at a distance from land corresponding to more than 10 minutes at normal cruise speed, unless such helicopter is equipped with a radio altimeter with an audio voice warning or other aural means of notifying the flight crew when operating below a preset height and with a visual warning capable of alerting the flight crew when operating below a preset height selectable by the flight crew.

Equipment for operations in icing conditions

- **91.04.9** (1) No owner or operator of an aircraft shall operate the aircraft in forecast or actual icing conditions unless such aircraft is certificated and equipped to operate in icing conditions.
- (2) The owner or operator shall not operate the aircraft in forecast or actual icing conditions by night unless such aircraft is equipped with a means to illuminate or detect the formation of ice.
- (3) The means of illumination referred to in sub-regulation (2), shall be of a type which does not cause glare or reflection which may handicap flight deck crew members in the performance of their duties.

Flight recorders

- **91.04.10** (1) For the purposes of this regulation, any reference to the initial date of a type certificate or certificate of airworthiness means the first time that type certificate or certificate of airworthiness was issued for that aircraft type.
- (2) No owner or operator shall operate an aircraft engaged in international general aviation operations which
 - is an aeroplane with a MCM exceeding 27 000 kg for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such aeroplane is equipped with a Type I FDR that complies with the requirements prescribed in Document SA-CATS 91;
 - (b) is an aeroplane with a MCM exceeding 5 700 kg for which the individual certificate of airworthiness was first issued on or after 1 January 2005 unless such aeroplane is equipped with a Type IA FDR that complies with the requirements prescribed in Document SA-CATS 91;
 - (c) is a helicopter with a MCM exceeding 7 000 kg, or having a passenger seating configuration of more than nineteen, for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such helicopter is

- equipped with a Type IV FDR that complies with the requirements prescribed in Document SA-CATS 91; or
- (d) is a helicopter with a MCM exceeding 3 180 kg for which the individual certificate of airworthiness is first issued after 1 January 2016 unless such helicopter is equipped with a Type IVA FDR that complies with the requirements prescribed in Document SA-CATS 91.
- (3) A turbine-engine aeroplane with a MCM exceeding 27 000 kg of which the prototype was type certificated by an appropriate authority after 30 September 1969, may not be operated in general aviation operations within the Republic of South Africa unless such aeroplane is equipped with a Type II FDR that complies with the requirements prescribed in Document SA-CATS 91.
 - (4) No owner or operator shall operate -
 - (a) an aeroplane with a MCM exceeding 5 700 kilograms and to which an individual certificate of airworthiness was first issued on or after 1 January 1987;
 - (b) a turbine engine aeroplane to which an individual certificate of airworthiness was first issued before 1 January 1987 and is of a type for which the prototype was certified by an appropriate authority after 30 September 1969, which is an aeroplane with a MCM exceeding 27 000 kilograms; or
 - (c) a helicopter with a MCM exceeding 7 000 kilograms,

unless such aeroplane or helicopter is equipped with a CVR which complies with the requirements prescribed in Document SA-CATS 91.

- (5) No owner or operator shall operate a turbine engine aeroplane for which a type certificate was first issued on or after 1 January 2016 and required to be operated by more than one pilot unless such aeroplane is equipped with either a CVR or a CARS.
- (6) No owner or operator shall operate an aircraft for which the individual certificate of airworthiness is first issued on or after 1 January 2016 and which is required to be fitted with a CVR or for aeroplanes, a CARS, unless the CVR or CARS, as applicable, is provided with an independent power source that complies with the requirements prescribed in Document SA-CATS 91.
- (7) No owner or operator shall operate an aircraft for which the individual certificate of airworthiness was first issued on or after 1 January 2016, which utilises any data link communications and is required to carry a CVR, unless all data link communications messages to and from the aircraft are recorded on a data link recorder (DLR) or other flight recorder. The minimum recording duration shall be equal to the duration of the CVR and shall be correlated to the recorded cockpit audio.
- (8) No owner or operator shall operate an aircraft which is modified on or after 1 January 2016 to install and utilise any data link communications and is required to carry a CVR, unless the data link communications messages are recorded on a DLR or other flight recorder.
- (9) The FDR required by this regulation shall be capable of retaining the information recorded during at least –

- (a) in the case of an aeroplane, the last 25 hours of its operation; or
- (b) in the case of a helicopter, the last 10 hours of its operation.
- (10) The CVR or CARS required by this regulation shall be capable of retaining information recorded during at least the last 30 minutes of the aircraft's operation until 1 January 2016, and thereafter during at least the last 2 hours of its operation;
- (11) No owner or operator shall use the following mediums to record any information or data required to be recorded by this regulation
 - (a) engraving metal foil, photographic film and analogue using frequency modulation (FM) in FDRs;
 - (b) from 1 January 2016, magnetic tape in FDRs and magnetic tape and wire in CVRs.
 - (12) The flight recorder shall not be switched off during flight.
- (13) Each flight recorder installed in an aircraft shall be located and installed in such a manner that maximum practicable protection is provided, in order that, in the event of an accident or incident, the recorded data may be recovered in a preserved and intelligible state. Flight recorders shall meet the installation, crashworthiness and fire protection specifications prescribed in Document SA-CATS 91.
- (14) The owner or operator of the aircraft shall ensure that retrieving the recorded data from the storage medium will be readily possible.
- (15) The PIC, owner or operator shall ensure, to the extent possible, in the event the aircraft becomes involved in an accident or incident, that
 - (a) all related flight recorder records, and if possible the associated flight recorders, are preserved and retained in safe custody pending their disposition to the accident or incident investigation team;
 - (b) the flight recorders are deactivated upon completion of flight time following an accident or incident; and
 - (c) the flight recorders are not reactivated before their disposition to the accident or incident investigation team.
- (16) An owner or operator shall ensure that the quality assurance programme of the organisation responsible for the maintenance of his or her aircraft includes verification of the measurement range, recording interval and accuracy of parameters on installed flight recorder equipment.
- (17) An owner or operator shall ensure that documentation concerning parameter allocation, conversion equations, periodic calibration and other serviceability/maintenance information is maintained by the organisation responsible for the maintenance of his or her aircraft. The documentation shall be sufficient to ensure that accident investigation authorities have the necessary information to read out the data in engineering units.
 - (18) The owner or operator of the aircraft shall –

- (a) conduct daily and annual inspections of each flight recorder as specified in Document SA-CATS 91; and
- (b) record and retain the results of such check for a period of five years calculated from the date of such check.
- (19) The CVR and FDR referred to in this regulation may be combined.
- (20) An aircraft may commence a flight with the FDR inoperative: Provided that –
- (a) for aircraft with an approved MEL, the aircraft is operated in accordance with that MEL and such MEL incorporates the provisions of paragraph (b) below; or
- (b) for aircraft without an approved MEL
 - (i) the aircraft shall not depart from an aerodrome where repairs or replacements to such FDR can be made;
 - (ii) the aircraft does not exceed six further consecutive flights with the FDR unserviceable;
 - (iii) not more than 48 hours have elapsed since the FDR became unserviceable; and
 - (iv) any CVR is combined with the FDR.
- (21) An aircraft may commence a flight with the CVR or CARS inoperative: Provided that –
- (a) for aircraft with an approved MEL, the aircraft is operated in accordance with such MEL; or
- (b) for aircraft without an approved MEL
 - (i) the aircraft shall not take-off from an aerodrome where repairs or replacements to such CVR can be made;
 - (ii) the aircraft does not exceed six further consecutive flights with the CVR unserviceable;
 - (iii) not more than 48 hours have elapsed since the CVR became unserviceable; and
 - (iv) any FDR required to be carried, is operative, unless the FDR is combined with a CVR.

Seats, seat safety belts, harnesses and child restraint devices

- **91.04.11** (1) No owner or operator of an aircraft shall operate the aircraft unless such aircraft is equipped, as applicable, with
 - (a) a seat or berth for each person who is aged two years or more;
 - (b) a safety belt with or without a diagonal shoulder strap, or a safety harness, for use in each passenger seat for each passenger who is aged two or more;
 - (c) a safety belt for use in each passenger berth;
 - (d) a child restraint device for each passenger who is less than two years of age;

- (e) a safety harness for each flight crew member seat, incorporating a device which will automatically restrain the occupant's torso in the event of rapid deceleration; and
- (f) a safety harness for each cabin crew member seat:

Provided that a safety belt with one diagonal shoulder strap is permitted if the fitting of a safety harness is not reasonably practical.

- (2) Seats for cabin crew members shall, where possible, be located near floor-level emergency exits and additional cabin crew member seats required shall be located such that a cabin crew member may best be able to assist passengers in the event of an emergency evacuation. Seats shall be forward or rearward facing within 15° of the longitudinal axis of the aircraft.
- (3) If the PIC cannot see all the passenger seats in the aircraft from his or her own seat, a means of indicating to all passengers and cabin crew members that seat belts should be fastened, shall be installed.
 - (4) All safety harnesses and safety belts shall have a single point release.

Stowage of articles, baggage and cargo

- **91.04.12** No owner or operator of an aircraft shall operate the aircraft unless all articles, baggage and cargo carried on board, except those items in use by either the flight crew or by passengers, if such use is not prohibited in the interest of the safety of the aircraft or its occupants, are placed
 - (a) in a manner which prevents movement likely to cause injury or damage and does not obstruct aisles and exits; or
 - (b) in stowages designed to prevent movement likely to cause injury or damage.

First aid and universal precaution kits

- **91.04.13** (1) No owner or operator of an aircraft used in general aviation operations shall operate the aircraft unless such aircraft is equipped with the first aid kit consisting of the medical supplies as prescribed in Document SA-CATS 91.
- (2) The owner or operator shall carry out periodical inspections of the first aid kit to ensure that, as far as practicable, the contents thereof are in a condition necessary for their intended use.
- (3) The contents of the first aid kit shall be replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances require.
 - (4) The first aid kit shall be readily accessible to the crew or passengers.
- (5) No owner or operator of an aircraft used in general aviation operations for which the maximum certificated passenger seating is 20 or more and on which is carried a cabin attendant shall operate the aircraft unless such aircraft is equipped with universal precaution kits specified in Document SA-CATS 91.

(6) The contents of the universal precaution kits shall be as prescribed in Document SA-CATS 91.

First aid oxygen

- **91.04.14** (1) No owner or operator of an aircraft in respect of which the carriage of a cabin crew member is required in terms of this Part, shall operate the aircraft unless such aircraft is equipped with the appropriate supply of first aid oxygen prescribed in Document SA-CATS 91.
- (2) The conditions, rules, requirements, procedures or standards for first aid oxygen shall be as prescribed in Document SA-CATS 91.

Supplemental oxygen in case of pressurised aircraft

- **91.04.15** (1) No owner or operator of a pressurised aircraft shall operate the aircraft unless such aircraft is equipped with the supplemental oxygen as prescribed in Document SA-CATS 91 and such oxygen may be used continuously whenever the circumstances for which its supply has been prescribed prevail.
- (2) No owner or operator of a pressurised aircraft shall operate the aircraft above 25 000 feet unless all flight crew members have available at their flight duty station a quick-donning type of oxygen mask which will readily supply oxygen upon demand.

Supplemental oxygen in case of non-pressurised aircraft

- **91.04.16** (1) No owner or operator of a non-pressurised aircraft shall operate the aircraft at altitudes between 10 000 feet and 12 000 feet for longer than 120 minutes intended flight time, or above 12 000 feet, unless such aircraft is equipped with the supplemental oxygen as prescribed in Document SA-CATS 91 and such oxygen may be used continuously whenever these circumstances prevail.
- (2) The conditions, rules, requirements, procedures or standards for supplemental oxygen shall be as prescribed in Document SA-CATS 91.

Flight crew protective breathing equipment

- **91.04.17** (1) No person shall operate a pressurised aeroplane or an unpressurised aeroplane with a MCM exceeding 5 700 kilograms and a maximum approved passenger seating configuration of more than 19 seats, at altitudes above 12 000 feet, unless such aeroplane
 - (a) is equipped with equipment to protect the eyes, nose and mouth of each flight crew member while on flight deck duty and to provide oxygen for a period of at least 15 minutes:
 - (b) has sufficient portable protective breathing equipment to protect the eyes, nose and mouth of all cabin crew members required to be carried in terms of this Part and to provide breathing gas for a period of at least 15 minutes; and
 - (c) if no cabin crew member is carried, is equipped with portable protective breathing equipment to protect the eyes, nose and mouth of one member of the flight crew and to provide breathing gas for a period of at least 15 minutes.

- (2) The supply for protective breathing equipment may be provided by supplemental oxygen referred to in regulation 91.04.15 or 91.04.16.
- (3) Protective breathing equipment intended for use by flight deck crew, shall be conveniently located on the flight deck and be easily accessible for immediate use by each required flight deck crew member at his or her assigned duty station.
- (4) Protective breathing equipment intended for use by cabin crew shall be installed adjacent to each required cabin crew member duty station.
- (5) Additional, easily accessible portable protective breathing equipment shall be provided and located at, or adjacent to, the hand fire extinguishers: Provided that where the fire extinguisher is located inside a cargo compartment, the protective breathing equipment shall be stowed outside, but adjacent to, the entrance to such compartment.
- (6) Protective breathing equipment, while in use, shall not prevent communication, where required.

Hand-held fire extinguishers

91.04.18 No owner or operator of an aircraft shall operate the aircraft unless such aircraft is equipped with the appropriate hand-held fire extinguishers as prescribed in Document SA-CATS 91.

Crash axes and crowbars

- **91.04.19** (1) No owner or operator of an aeroplane with a MCM exceeding 5 700 kilograms or a maximum approved passenger seating configuration of more than nine seats, shall operate the aeroplane unless such aeroplane is equipped with at least one crash axe or crowbar located on the flight deck.
- (2) If the maximum approved passenger seating configuration is more than 200 seats, an additional crowbar shall be carried in the aeroplane and located out of sight in or near the most rearward galley area.

Marking of break-in points

91.04.20 The owner or operator of an aircraft shall ensure that, if areas of the fuselage suitable for break-in by rescue crews in emergency, are marked on the aircraft, such areas shall be marked in accordance with the requirements as prescribed in Part 47.

Megaphones

91.04.21 No owner or operator of an aircraft with a maximum approved passenger seating configuration of more than 60 seats and which is carrying one or more passengers, shall operate the aircraft unless such aircraft is equipped with the appropriate portable battery-powered megaphones as prescribed in Document SA-CATS 91.

Emergency lighting

91.04.22 No owner or operator shall operate the aircraft unless such aircraft is equipped with the appropriate emergency lighting system as prescribed in Document SA-CATS 91.

Emergency locator transmitters

- **91.04.23** (1) Except as provided in sub-regulation (3), no owner or operator of an aircraft specified in Document SA-CATS 91 shall operate such aircraft unless it is equipped with one or more approved ELTs.
- (2) The number and type of ELTs, the manner in which these shall be carried, the specifications to which they shall adhere, the frequencies on which they shall be able to transmit and the manner in which they shall be maintained are prescribed in Document SA-CATS 91.
- (3) The following aircraft are exempted from the requirement prescribed in sub-regulation (1)
 - (a) aircraft engaged in flights remaining within a radius of 50 nautical miles from their point of departure;
 - (b) aircraft engaged in the aerial application of chemicals or other substances for agricultural purposes, and on flights incidental thereto;
 - (c) a new aircraft on a flight for a purpose associated with its manufacture and preparation for delivery, but not when on its delivery flight;
 - (d) an aircraft flown for the purpose of moving it to a place to have an approved ELT fitted, or a fitted ELT repaired, removed or overhauled: Provided that only the required flight crew members may be carried on board;
 - (e) an aircraft of which the ELT has been temporarily removed for inspection, repair, modification or replacement: Provided the necessary logbook entries have been made, a placard stating "ELT not installed or carried" has been installed in a position easily visible to the flight crew, and a period of 90 days is not exceeded;
 - (f) aircraft certified for research and development purposes;
 - (g) aircraft used for showing compliance with regulations, or in crew training, air racing, air display or market surveys;
 - (h) aircraft with an approved seating configuration of not more than one person;
 - (i) aircraft operated in terms of Part 94; and
 - (j) any aircraft on a flight or a series of flights for which an exemption in writing has been granted by the Director.
- (4) The Director shall maintain a register of all aircraft equipped with 406 MHz ELTs, which shall contain the following particulars
 - (a) the nationality and registration marks of the aircraft;
 - (b) particulars of the manufacturer's designation and serial number of the aircraft;
 - (c) the full name and contact details of the registered owner of the aircraft;
 - (d) the make and model number/s of the ELT/s;

- (e) the 15-digit Unique Identification Number (UIN) provided by the manufacturer of the ELT, or the aircraft's Mode S transponder code; and
- (f) the name/s and contact details of the person/s who know/s the aircraft's itinerary and who may be contacted 24 hours a day.
- (5) On the payment of the appropriate fee as prescribed in Part 187, an excerpt of the ELT register shall be furnished to any person who requests such an excerpt.
- (6) For the registration, deregistration and changing of an ELT, the fee as prescribed in Part 187 is payable.

Life jackets and other flotation devices

91.04.24 (1) No person -

- (a) shall operate an aeroplane other than an aeroplane referred to in paragraph (b)
 - (i) when flying over water and beyond gliding distance of land in the case of the aeroplane not capable of continuing the flight to an aerodrome with the critical power-unit becoming inoperative at any point along the route or any planned diversion;
 - (ii) when taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that in the event of an incident, there would be a likelihood of a ditching,

unless such aeroplane is equipped with a flotation device or a life jacket containing a survivor locator light, for each person on board, stowed in a position easily accessible, with safety belt fastened, from the seat or berth of the person for whose use it is provided, and an individual infant flotation device, containing a locator survival light for use by each infant on board;

- (b) shall operate a seaplane or amphibious aeroplane unless such seaplane or amphibious aeroplane is equipped with
 - (i) a flotation device or a life jacket containing a survivor locator light, for each person on board, stowed in a position easily accessible, with safety belt fastened, from the seat or berth of the person for whose use it is provided, and an individual infant flotation device, containing a survivor locator light, for use by each infant on board; and
 - (ii) life jackets, other than the life jackets referred to in subparagraph (i), for 20 per cent of the number of persons on board such seaplane or amphibious aeroplane, located in the passenger compartment near the emergency exits and readily accessible;
- (c) shall operate a helicopter over water beyond autorotative distance from land, other than only for take-off and initial climb, or final approach and landing, unless
 - (i) each person on board is wearing a life jacket containing a survivor locator light; and

- (ii) an individual infant flotation device containing a locator survival light for use by each infant on board, stowed in a position easily accessible for the person in which care the infant is; and
- (d) shall operate a free balloon or airship over a body of water that may pose a risk of drowning to any person on board such free balloon or airship unless the operator has put in place appropriate floatation devices or alternative drowning preventative measures.
- (2) No person shall operate the following helicopters over water unless such helicopter is certificated as an amphibian helicopter or for ditching or is equipped with permanent or rapidly deployable emergency flotation equipment
 - (a) a performance Class 3 helicopter operating below a height that would permit the helicopter to complete an autorotation to a landing on land in the event of an engine failure;
 - (b) a performance Class 1 or 2 helicopter operating in a hostile environment more than 10 minutes from land that would be unable to maintain flight to a suitable landing site in the event of an engine failure; or
 - (c) a performance Class 1 helicopter operating in a non-hostile environment at a distance from land equivalent to 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser:

Provided that in the case of aerial spraying operations over water, the owner or operator may apply to the Director for an exemption in terms of Part 11.

(3) Sea state shall be an integral part of ditching information.

Life rafts and survival radio equipment for extended over-water flights

- **91.04.25** No person shall operate an aircraft over water at a distance equivalent to 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser, away from land unless such aircraft
 - (a) is equipped with life rafts sufficient to accommodate all persons on board; and
 - (b) is equipped with the survival equipment and complies with the provisions as prescribed in Document SA-CATS 91.

Survival equipment

91.04.26 No person shall operate an aircraft over areas where search and rescue would be especially difficult, unless such aircraft is equipped with the appropriate survival equipment and complies with the provisions as prescribed in Document SA-CATS 91.

Seaplanes, amphibious aeroplanes and amphibious helicopters

91.04.27 No person shall operate a seaplane, amphibious aeroplane or amphibious helicopter on water, unless it is equipped with –

- (a) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring such seaplane, amphibious aeroplane or amphibious helicopter on water, appropriate to its size, mass and handling characteristics; and
- (b) equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.

Airborne collision avoidance system

- **91.04.28** (1) Except as otherwise provided for in Part 121 and Part 135, no person may operate a turbine-engine aeroplane of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers, for which the individual certificate of airworthiness was first issued after 1 January 2007, unless such aeroplane is equipped with an ACAS that meets the specifications prescribed in Document SA-CATS 91.
- (2) No person shall operate an aeroplane required to be equipped with ACAS unless he or she has completed the training and checking as specified in Document SA-CATS 91.
 - (3) ACAS training shall be provided through an approved training programme.
 - (4) Whenever an aircraft is equipped with an ACAS, such system shall –
 - (a) meet the specifications in, and function in accordance with, the relevant provisions of Document SA-CATS 91; and
 - (b) when serviceable, be activated at all times during flight in all airspace, including oceanic, international, foreign and domestic airspace, even if in terms of these regulations the carriage of ACAS equipment is not compulsory for that particular type of aircraft or the type of operation.
- (5) Whenever an ACAS becomes unserviceable during flight when operation of ACAS is mandatory, the PIC of that aeroplane shall inform the responsible ATSU as soon as is practical.
- (6) No pilot may act as PIC of a South African-registered aircraft during any period while an ACAS is activated unless such pilot is ACAS-current.
- (7) When a flight crew receives a traffic avoidance instruction from an ATSU that is in conflict with the resolution advisory message issued by the aircraft's approved ACAS, the ACAS resolution advisory takes priority over the ATSU instruction.
- (8) Document SA-CATS 91 contains instructions in respect of ACAS operational use and event reporting.
 - (9) For the purpose of this regulation, an ACAS-current pilot means a pilot who, –
 - (a) within the immediately preceding 12 months, completed initial ACAS II training;
 - (b) within the immediately preceding two (2) years, completed initial ACAS training and subsequently completed ACAS II renewal training more than 9 months and less than 12 months after the earlier training; or

(c) within the immediately preceding 12 months, completed a session of ACAS II cyclic training.

Cabin pressurisation

91.04.29 No person shall operate a pressurized aeroplane, for which the individual certificate of airworthiness was first issued on or after 1 January 1990, above 25 000 feet unless such aeroplane is equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

Terrain awareness and warning systems

- **91.04.30** (1) Within six months from the commencement of these Regulations, a turbine-engine aeroplane of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers operating according to the IFR shall be equipped with a TAWS which has a predictive terrain avoidance function that meets the requirements specified in Document SA-CATS 91.
- (2) A TAWS installed in turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers for which the individual certificate of airworthiness was first issued after 1 January 2011 shall provide, as a minimum, warnings of at least the circumstances specified in Document SA-CATS 91.
- (3) Except as provided in sub-regulation (4), each TAWS required by sub-regulation (1) shall be functioning properly prior to flight.
 - (4) An aircraft may be operated without a functioning TAWS –
 - (a) as provided for in an approved MEL; or
 - (b) if repairs cannot be effected at the aerodrome last operated into, the aircraft is flown by the most direct routing to the nearest facility where the repairs can be made.
- (5) A TAWS shall automatically provide a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.

RVSM operations

- **91.04.31** (1) Except as provided in an ATSU clearance to climb or descend through RVSM) airspace to or from levels above the RVSM flight level band, no PIC shall enter RVSM airspace unless
 - (a) a valid RVSM approval certificate has been issued for such aircraft;
 - (b) the prescribed minimum RVSM equipment is serviceable: and
 - (c) the flight crew has successfully completed the RVSM training as prescribed in Document SA-CATS 91.

- (2) The requirements for the issue of an RVSM approval certificate, including minimum equipment, maintenance and crew training requirements, are those as specified in Document SA-CATS 91.
- (3) An application for an RVSM approval certificate for a South African registered aircraft shall be made to the Director in the format prescribed in Document SA-CATS 91 and shall be accompanied by
 - (a) in the case of a commercial air transport operator, two copies of the proposed relevant amendments to
 - (i) the operations manual;
 - (ii) the aircraft maintenance schedule; and
 - (iii) the maintenance control manual; and
 - (b) in the case of a general aviation operator, the aircraft maintenance schedule.
- (4) In considering an application, contemplated in sub-regulation (3), the Director may conduct the investigation deemed necessary to ascertain that the applicant has complied with the requirements prescribed in Document SA-CATS 91 for RVSM operations.
- (5) If the Director is not so satisfied, he or she shall notify the applicant thereof, stating the reasons in the notification, and grant the applicant the opportunity to rectify any shortcoming within a determined period, after which period the Director may grant or refuse the application concerned.
- (6) If the Director is satisfied that the applicant has complied with the relevant requirements, the RVSM approval certificate shall be issued in the format as prescribed in Document SA-CATS 91.
- (7) The Director shall maintain a register of all RVSM approval certificates issued in terms of this regulation and
 - (a) the register shall contain the following particulars
 - (i) the make, model and registration marks of the aircraft;
 - (ii) the full name of the owner of the aircraft or, if a licensed air operator, the name of the licence holder and the air service licence number;
 - (iii) the postal address of the certificate holder; and
 - (iv) the date on which the certificate was issued;
 - (b) the particulars, referred to in paragraph (a), shall be recorded in the register within 30 days from the date on which the certificate is issued by the Director;
 - (c) the register shall be kept in a safe place at the office of the Director or location he or she may approve; and
 - (d) a copy of the register may be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy. Document SA-CATS 91; and

- (bb) the appropriate fee as prescribed in Part 187.
- (9) The holder of an RVSM approval certificate endorsed for operations within RVSM airspace shall –
- (a) report within 24 hours to the Director any occurrence involving poor height-keeping in an RVSM environment as specified in Document SA-CATS 91; and
- (b) make an effective, timely response to each height-keeping error.
- (10) An owner or operator authorised to operate in RVSM airspace shall ensure that as a minimum each aeroplane type grouping of its fleet shall have their height-keeping performance monitored at least once every two years or within intervals of 1 000 flight hours per aeroplane, whichever period is longer, as defined in Document SA-CATS 91.
- (11) The monitoring requirements specified in sub-regulation (10) may be met through the use of data obtained from any air traffic services regional monitoring programme.

SUBPART 5: COMMUNICATION AND NAVIGATION

Communication equipment

- **91.05.1** (1) Except with prior written approval by the Director, no aircraft shall be operated in designated airspace or under IFR unless such aircraft is equipped with radio communication equipment capable of
 - (a) two-way communication at any time during the flight on such frequencies as may be prescribed by the appropriate authority; and
 - (b) receiving meteorological information at any time during flight.
- (2) The radio communication equipment referred to in sub-regulation (1) shall be capable of providing for communication on the aeronautical emergency frequency 121.5 MHz.
- (3) All flight crew members involved in large aeroplane operations and who are required to be on flight deck duty shall communicate through boom or throat microphones below the transition level/altitude.
- (4) The radio communication equipment in the aircraft shall be installed and be of a type as prescribed in Document SA-CATS 91.
- (5) The provisions of this regulation shall not be applicable to a parachute, a hang-glider or a paraglider.

Navigation equipment

91.05.2 (1) No person shall operate an aircraft unless such aircraft is equipped with navigation equipment enabling it to proceed in accordance with its flight plan, including approaches at the planned destination or any alternate aerodromes, and the appropriate ATS requirements: Provided that the provisions of this regulation shall not apply to flights operated in accordance with VFR, if such flights can be accomplished by visual reference to landmarks. Such landmarks for helicopter operations shall be no further apart than 60 nautical miles.

- (2) The aircraft shall be equipped as prescribed in Document SA-CATS 91 and with sufficient navigation equipment to ensure that in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment enables such aircraft to proceed with such flight and installed such that the failure of any single unit required for either navigation or communications purposes or both will not result in the failure of another unit required for navigation or communications purposes.
- (3) No person shall operate an aircraft in airspace where minimum navigation performance or performance-based navigation specifications apply, unless the aircraft is equipped with navigation equipment that meets the performance specifications as prescribed in Document SA-CATS 91.
- (4) In an aircraft required to be operated by two pilots, the navigation equipment referred to in sub-regulation (3) shall be visible and usable by each pilot seated at his or her duty station.
- (5) No person may use inertial navigation or reference systems for navigation unless approved under Parts 93, 121, 127 or 135, as applicable.
- (6) No person may operate an aircraft under IFR using any system required for navigation unless such system is maintained, checked and inspected under an approved procedure.
- (7) An owner or operator shall not use a navigation system based on electronic data unless
 - (a) procedures are implemented that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it;
 - (b) the source of the data is -
 - (i) the manufacturer of the aircraft;
 - (ii) the manufacturer of the navigation system; or
 - (ii) a supplier satisfactory to the manufacturer of the aircraft or navigation system or to the Director; and
 - (c) procedures are implemented to verify the accuracy and validity of the data received.

Use of global navigation satellite system

- **91.05.3** (1) No person shall operate an aircraft using a GNSS as a means of navigation unless
 - (a) the GNSS equipment meets the airworthiness criteria prescribed in Document SA-CATS 91;
 - (b) all flight crew members required by regulation or the type certificate of the aircraft being flown have received the training and checking specified in Document SA-CATS 91; and
 - (c) the procedures specified in Document SA-CATS 91 are followed.
- (2) In order to fly published RNAV (GNSS) arrivals, departures and approach procedures; the PIC shall ensure that –

- (a) the air navigation routes to be flown are contained in the database of the aircraft; and
- (b) the information contained in the aircraft database is current.
- (3) The PIC shall fly the instrument departure of a FMS equipped aircraft without the capability of manually setting the course direction indicator (CDI), with the aid of a flight director.
 - (4) Helicopter-only RNAV (GNSS) departure procedures shall be flown at 70 knots or less.
- (5) Upon clearance for the approach by the appropriate ATSU, the pilot shall select the appropriate aerodrome, the runway approach procedure and the initial approach fix on the RNAV system to determine the validity of the RAIM for such approach.

Operational criteria for use of RNAV/BARO VNAV systems

- **91.05.4** (1) No person may conduct RNAV/BARO vertical navigation (VNAV) operations unless approved by the Director in terms of the operational provisions specified in Document SA-CATS 91.
- (2) An aircraft equipped with a RNAV/BARO VNAV system approved by the Director for the appropriate level of RNAV/BARO VNAV operations, may be used to conduct RNAV/BARO VNAV approaches if
 - (a) the RNAV/BARO VNAV equipment is serviceable;
 - (b) the aircraft and aircraft systems are appropriately certified for the intended RNAV/BARO VNAV approach operations and the aircraft is equipped with an integrated LNAV system with an accurate source of barometric altitude; and
 - (c) the VNAV altitudes and all relevant procedural and navigational information are retrieved from a current navigation database whose integrity is supported by approved appropriate quality assurance measures.

SUBPART 6: RULES OF THE AIR

Division One: Flight Rules

Landing on roads

- **91.06.1** No person shall use a public road as a place of landing or take-off in an aircraft, except
 - (a) in the case of an emergency involving the safety of the aircraft or its occupants;
 - (b) for the purpose of saving human lives; or
 - (c) when involved in civil defence or law-enforcement operations: Provided that at all times reasonable care is taken for the safety of others with due regard to the prevailing circumstances.

Dropping objects, spraying or dusting

91.06.2 Except in an emergency or unless granted special permission by the Director or approved by an ATSU, no article shall be dropped from an aircraft in flight other than –

- (a) fine sand or clean water used as ballast; or
- (b) chemical substances for the purpose of spraying, dusting or cloud seeding.

Picking up objects

91.06.3 The PIC of an aircraft in flight shall not permit objects to be picked up except with the prior written approval of the Director.

Towing

91.06.4 The PIC of an aircraft in flight shall not permit anything to be towed by the aircraft except with the prior written approval of the Director.

Operation of vehicle- or vessel-towed aircraft

- **91.06.5** (1) Except with the prior written approval of the Director and subject to such conditions as he or she may impose, an aircraft which is intended, for purposes of flight, to be towed by a vehicle or vessel travelling on the surface or to be moored on the surface, shall not
 - (a) be flown higher than 150 feet above the surface on which the towing vehicle or vessel is travelling or to which such aircraft is moored;
 - (b) be flown closer than five nautical miles from the boundary of an aerodrome; or
 - (c) take-off from, land on or be flown above any public road.
- (2) The provisions of sub-regulation (1)(a) and (b) shall not apply to the winching or towing of gliders at the aerodrome of departure.

Proximity and formation flights

- **91.06.6** (1) No person shall operate an aircraft in formation flight while carrying passengers for commercial purposes or, except as provided in sub-regulation (2),
 - (a) in such proximity to other aircraft so as to create a collision hazard;
 - (b) in formation flight, except by arrangement with the PIC of each aircraft in the formation; or
 - (2) Formation flight in controlled airspace may be approved by an ATSU: Provided that –
 - (a) the formation operates as a single aircraft with regard to navigation and position reporting;
 - (b) separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway; and
 - (c) a distance not exceeding 1 km (0.5 NM) laterally and longitudinally and 30 m (100 ft) vertically from the flight leader shall be maintained by each aircraft.
 - (3) Formation flight for display purposes may be approved by the Director.

Right of way

- **91.06.7** (1) An aircraft which has the right-of-way, shall maintain its heading and speed, but nothing in these provisions shall relieve the PIC of an aircraft from the responsibility of taking such action as will best avert collision, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment.
- (2) An aircraft which is obliged, by the provisions of this Subpart, to keep out of the way of another aircraft, shall avoid passing over or under the other aircraft, or crossing ahead of such aircraft, unless passing well clear, taking into account the effects of wake turbulence.
- (3) When two aircraft are approaching head-on or approximately so and there is danger of collision, each aircraft shall alter its heading to the right.
- (4) When two aircraft are converging at approximately the same level, the aircraft which has the other aircraft on its right, shall give way, except in the following circumstances
 - (a) power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons;
 - (b) airships shall give way to gliders and balloons;
 - (c) gliders shall give way to balloons;
 - (d) power-driven aircraft shall give way to aircraft which are
 - (i) seen to be towing other aircraft or objects;
 - (ii) carrying an underslung load or are engaged in winching operations; and
 - (iii) being towed or tethered.
- (5) An aircraft which is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the overtaken aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from its obligation until such aircraft is entirely past and clear: Provided that where a right-hand circuit is being followed at an aerodrome, the overtaking aircraft shall alter its heading to the left.
- (6) An aircraft in flight or operating on the ground or water, shall give way to other aircraft landing or on final approach to land.
- (7) When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, the aircraft at the higher level shall give way to the aircraft at the lower level, but
 - (a) the latter aircraft shall not take advantage of this provision to cut in front of another aircraft which is on final approach to land, or to overtake such aircraft; and
 - (b) power-driven heavier-than-air aircraft shall give way to gliders in all circumstances.
- (8) An aircraft about to take-off, shall not attempt to do so until there is no apparent risk of collision with other aircraft.

- (9) An aircraft which is aware that another aircraft is compelled to land, shall give way to such aircraft.
- (10) For the purposes of this regulation, an overtaking aircraft is an aircraft which approaches another aircraft from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter aircraft, and will therefore be in such position with reference to the other aircraft, that by night it should be unable to see either of the other aircraft's wingtip navigation lights.

Following line features

91.06.8 An aircraft flying at or below 1 500 feet above the surface and following a power line, a road, a railway line, a canal, a coastline or any other line feature within one nautical mile of such line feature, shall fly to the right of such line, road, railway line, canal, coastline or other line feature, except when the aircraft is instructed to do otherwise by an ATSU.

Aircraft speed

- **91.06.9** (1) Unless otherwise authorised by the Director, no person shall, outside controlled airspace and below flight level 100, fly an aircraft at an indicated air speed of more than 250 knots.
- (2) Unless otherwise authorised or required by an ATSU, no person shall fly an aircraft within a control zone or an aerodrome traffic zone at an indicated air speed of more than
 - (a) 160 knots, in the case of a reciprocating-engine aircraft; or
 - (b) 200 knots, in the case of a turbine-powered aircraft:

Provided that if the minimum safe indicated air speed for a particular flight is greater than the maximum indicated air speed prescribed in this regulation, the aircraft may be flown at the minimum safe indicated air speed.

Lights to be displayed by aircraft

- **91.06.10** (1) Except as provided by sub-regulation (4) and unless the aircraft was initially type-certificated without such lights or is a non-type certificated aircraft approved without such lights, all aircraft shall display
 - (a) while operating in flight during the day and at all times at night, anti-collision lights intended to attract attention to the aircraft;
 - (b) while operating during night, navigation lights intended to indicate the relative path of the aircraft to an observer;
 - (c) while operating on the movement area of an aerodrome, lights intended to attract attention to the aircraft, as specified in the IAIP; and
 - (d) while operating with engines running on the movement area of an aerodrome, display a rotating beacon to indicate that fact.
- (2) Except as provided by sub-regulation (4) -
 - (a) all aircraft moving on the movement area of an aerodrome during night shall

- display navigation lights intended to indicate the relative path of the aircraft to an observer; and
- (b) unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome during night shall display lights intended to indicate the extremities of their structure.
- (3) In respect of sub-regulations (1) (b) and (2) (a), other lights shall not be displayed if they are likely to be mistaken for these lights.
- (4) A pilot shall be permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirements of sub-regulations (1), (2) and (3) if they do or are likely to
 - (a) adversely affect the satisfactory performance of duties; or
 - (b) subject an outside observer to harmful dazzle.
- (5) The lights which shall be displayed by aircraft by day, night, on water or on the manoeuvring area of an aerodrome, are prescribed in Document SA-CATS 91.

Taxi rules

- **91.06.11** (1) Aircraft which are landing or taking off, shall be given right of way by other aircraft and by vehicles.
- (2) An aircraft shall, after landing, unless otherwise authorised or instructed by an ATSU, be moved clear of the runway in use, as soon as it is safely possible to do so.
- (3) A vehicle which is towing an aircraft shall be given right of way by vehicles and by other aircraft which are not landing or taking off.
 - (4) An aircraft shall be given right of way by a vehicle which is not towing an aircraft.
- (5) An aircraft or vehicle which is obliged by the provisions of this regulation to give right of way to another aircraft, shall, if necessary in the circumstances in order to do so, reduce its speed or stop.
- (6) If danger of collision exists between an aircraft or vehicle and another aircraft or vehicle, such of the following procedures as may be appropriate in the circumstances, shall be applied:
 - (a) When the two are approaching head-on or nearly head-on, each shall turn to the right;
 - (b) when one is overtaking the other, the one which is overtaking shall keep out of the way of the other by turning to the right, and no subsequent change in the relative positions of the two shall absolve the one which is overtaking from this obligation, until it is finally past and clear of the other;
 - (c) when the two are converging, the one which has the other on its right, shall give way to the other and shall avoid crossing ahead of the other unless passing well clear of it.
- (7) A vehicle moving along a runway or taxiway, shall as far as practicable keep to the right side of the runway or taxiway.

- (8) When an aircraft is being towed, the person in charge of the towing vehicle shall be responsible for compliance with the provisions of this regulation.
- (9) An aircraft operated on a controlled aerodrome shall not taxi on the manoeuvring area without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.
- (10) An aircraft taxiing on the manoeuvring area of an uncontrolled aerodrome shall taxi in accordance with the ground control procedures which may be in force at such aerodrome.
 - (11) While taxiing, an aircraft shall
 - (a) stop and hold at all runway-holding positions unless otherwise authorized by the aerodrome control tower; and
 - (b) stop at all lighted stop bars and may proceed further when the lights are switched off.
- (12) Nothing in this regulation shall relieve the PIC of an aircraft or the person in charge of a vehicle, from the responsibility for taking such action as will best aid to avert collision.

Operation on and in vicinity of aerodrome

- **91.06.12** (1) The PIC of an aircraft operated on or in the vicinity of an aerodrome, shall be responsible for compliance with the following rules
 - (a) observe other aerodrome traffic for the purpose of avoiding collision;
 - (b) conform with or avoid the pattern of traffic formed by other aircraft in operation;
 - (c) make all turns to the left when approaching for a landing and after taking off, unless otherwise instructed by an ATSU, or unless a right hand circuit is in force: Provided that a helicopter may, with due regard to other factors and when it is in the interest of safety, execute a circuit to the opposite side;
 - (d) land and take off, as far as practicable, into the wind unless safety, the runway configuration or air traffic considerations dictate that a different direction is preferable, or unless otherwise instructed by an ATSU; and
 - (e) fly across the aerodrome or its environs at a height of not less than 2 000 feet above the level of such aerodrome: Provided that if circumstances require such PIC to fly at a height of less than 2 000 feet above the level of the aerodrome, he or she shall conform with the traffic pattern at such aerodrome.
- (2) If an aerodrome control tower is in operation, the PIC shall also, whilst the aircraft is within the aerodrome traffic zone
 - (a) maintain a continuous radio watch on the frequency of the aerodrome control tower responsible for providing aerodrome control service at the aerodrome, establish two way radio communication as necessary for aerodrome control purposes and obtain such clearances for his or her movements as may be necessary for the protection of aerodrome traffic; or

- (b) if this is not possible, keep a watch for and comply with such clearances and instructions as may be issued by visual means.
- (3) If an aerodrome flight information service unit is in operation, the PIC shall also, whilst the aircraft is within the aerodrome traffic zone
 - (a) maintain a continuous radio watch on the frequency of the aerodrome flight information service unit responsible for providing aerodrome flight information service at the aerodrome, establish two-way radio communication as necessary for aerodrome flight information service purposes and obtain information in respect of the surface wind, runway in use and altimeter setting and in respect of aerodrome traffic on the manoeuvring area and in the aerodrome traffic zone; or
 - (b) if this is not possible, keep a watch for visual signals which may be displayed or may be issued by the aerodrome flight information service unit.
- (4) An aircraft which is unable to communicate by radio shall, before landing at an aerodrome, make a circuit of the aerodrome for the purpose of observing the traffic, and reading such ground markings and signals as may be displayed thereon, unless it has the consent of the appropriate ATSU to do otherwise.

Signals

- **91.06.13** (1) The PIC of an aircraft in flight shall, upon observing or receiving any of the signals as prescribed in Document SA-CATS 91, take such action as may be required by the interpretation of the signal as prescribed in Document SA-CATS 91.
- (2) No person may perform the functions of a signalman unless trained and qualified to carry out such functions as contained in Document SA-CATS 91.
- (3) Any person acting as a signalman shall be responsible for providing the standard marshalling signals, as prescribed in Document SA-CATS 91, to aircraft in a clear and precise manner.

Water operations

- **91.06.14** (1) When two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.
- (2) An aircraft which has another aircraft or a vessel on its right shall give way so as to keep well clear.
- (3) An aircraft approaching another aircraft or a vessel head-on, or approximately so, shall alter its heading to the right to keep well clear.
- (4) An aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall alter its heading to keep well clear.
- (5) Aircraft landing on or taking off from the water shall, insofar as practicable, keep well clear of all vessels and avoid impeding their navigation.

- (6) All aircraft on the water shall display lights between sunset and sunrise as prescribed in technical standard 91.06.10 of Document SA-CATS 91.
- (7) In areas in which the International Regulations for Preventing Collisions at Sea are in force, aircraft operated on the water shall comply with the provisions thereof.

Reporting position

- **91.06.15** (1) The PIC of an aircraft
 - (a) flying in controlled airspace;
 - (b) flying in advisory airspace; or
 - (c) on a flight for which alerting action is being provided,

shall ensure that reports are made to the responsible ATSU, as soon as possible, of the time and level of passing each compulsory reporting point, together with any other required information, and he or she shall further ensure that position reports are similarly made in relation to additional reporting points, if so requested by the responsible air traffic service unit and that, in the absence of designated reporting points, position reports are made at the intervals specified by the responsible air traffic service unit or published by the Director in terms of Part 175 for that area.

(2) Controlled flights providing position information to the appropriate ATSU via data link communications shall only provide voice position reports when requested.

Mandatory radio communication in controlled airspace

- **91.06.16** The PIC of an aircraft shall ensure that before the aircraft enters a controlled airspace, two-way radio contact is established with the responsible ATSU on the designated radio frequency, and shall ensure, while the aircraft is within, and until it leaves, the controlled airspace, that continuous radio watch is maintained and that such further two-way radio communication as such ATSU may require, is established: Provided that
 - (a) the ATSU may permit an aircraft not capable of maintaining continuous two-way radio communication, to fly in the control area, TMA, control zone or aerodrome traffic zone for which it is responsible, if traffic conditions permit, in which case the flight shall be subject to such conditions as such ATSU deems necessary to ensure the safety of other air traffic; and
 - (b) in the case of radio failure, a flight for which an air traffic service flight plan was filed and activated by the ATSU on receipt of a departure time, may continue in controlled airspace if the communication failure procedures specified in Document SA-CATS 91 are complied with.

Mandatory radio communication in advisory airspace

- **91.06.17** The PIC of an aircraft shall ensure that before the aircraft approaches or enters an advisory airspace
 - (a) two-way radio communication with the responsible ATSU is established on the designated radio frequency;

- (b) if such communication is not possible, two-way radio communication is established with any ATSU which is capable of relaying messages to and from the responsible ATSU; or
- (c) if such communication is not possible, broadcasts are made on the designated radio frequency giving information on the aircraft's intention to enter the airspace, and such PIC shall ensure that, while the aircraft is within the advisory airspace and until it departs therefrom, a continuous radio watch is maintained on the designated radio frequency and that
 - such further two-way radio communication as the responsible ATSU may require, is established with any other ATSU which is capable of relaying messages to and from such responsible ATSU;
 - (ii) if such communication is not possible, such further two-way radio communication is established with any other ATSU which is capable of relaying messages to and from the responsible ATSU, as such responsible ATSU may require; or
 - (iii) if such communication is not possible, broadcasts are made on the designated radio frequency giving information on passing reporting points and when leaving the airspace concerned: Provided that
 - (aa) an aircraft maintaining a Selcal watch while operating within an advisory route in the Johannesburg flight information region and whose Selcal callsign has been communicated to the Johannesburg flight information centre, shall be deemed to be maintaining a continuous radio watch; and
 - (bb) in the case of a radio failure, a flight for which an air traffic service flight plan was filed and activated by an ATSU on receipt of a departure time, may continue in advisory airspace if the communication failure procedures specified in technical standard 91.06.16 of Document SA-CATS 91 are complied with.

Compliance with rules of air and air traffic control clearances and instructions

- **91.06.18** (1) The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general operating rules in this Part and, in addition, when in flight, either with the VFR or the IFR.
 - (2) The pilot of an aircraft shall –
 - (a) comply with any air traffic control clearance which is obtained, unless the pilot obtains an amended clearance:
 - (b) operate the aircraft in accordance with any instruction issued by an ATSU in an area in which an air traffic control service is provided; and
 - (c) when deviating from an air traffic control clearance or instruction, notify the ATSU of the deviation, as soon as practicable.
- (3) The pilot of an aircraft shall include the information specified in Document SA-CATS 91 when requesting a deviation from an air traffic control clearance or flight planned altitude or route.

(4) Nothing in these Regulations shall relieve the PIC of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories by ACAS equipment, as will best avert a collision.

Prohibited areas

- **91.06.19** (1) The Director may, by notice in the IAIP, declare any area to be a prohibited area and shall, when so declaring an area to be a prohibited area
 - (a) specify a height above the ground surface of such area; or
 - (b) specify an altitude in respect of such area, as the Director may deem expedient, in the notice in question.
- (2) No person shall fly any aircraft whatsoever in the air space above a prohibited area
 - (a) below the height specified in terms of sub-regulation (1)(a); or
 - (b) below the altitude specified in terms of sub-regulation (1)(b), as the case may be, in respect of the prohibited area in question.

Restricted areas

- **91.06.20** (1) The Director may by notice in the IAIP declare any area to be a restricted area and shall, when so declaring an area to be a restricted area, specify in the notice in question
 - (a) the nature and extent of the restriction applicable in respect of the area in question; and
 - (b) the authorisation under which flights in such restricted area shall be permitted.
- (2) No person shall, in contravention of a restriction contemplated in sub-regulation (1)(a), fly any aircraft to which the said restriction applies, in any restricted area, unless the flight in question has been permitted by virtue of an authorisation contemplated in sub-regulation (1)(b).

Division Two: Visual flight rules

Visibility and distance from cloud

- **91.06.21** (1) Every VFR flight shall be so conducted that the aircraft is flown with visual reference to the surface by day and to identifiable objects by night and at no time above more than three eighths of cloud within a radius of five nautical miles of such aircraft and
 - (a) in the case of aircraft excluding helicopters operating under conditions of visibility and distance from cloud equal to, or greater than, the conditions specified in tables 1 and 2 –

Table 1

Airspace	Forward Flight visibility	Distance from clouds	Ground visibility and ceiling
Control zones	Five	Horizontally:	No aircraft shall take-off from, land at, or

	km	600 metres Vertically: 500 feet	approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than five km and the ceiling is less than 1 500 feet. (1)
Within an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone)	Five km	Horizontally: 600 metres Vertically: 500 feet	No aircraft shall take-off from, land at or approach to land at an aerodrome or fly within the aerodrome traffic zone when the ground visibility within such aerodrome traffic zone is less than five km and the ceiling is less than 1 500 feet.

Table 2

In Airspaces other than those specified in Table 1

Airspace class	Altitude band	Forward Flight visibility	Distance from cloud
CFG	At and above 10,000 feet above MSL	8 km	1 500 m horizontally 1 000 ft vertically
CFG	Below 10,000 feet AMSL and above 3,000ft above MSL, or above 1,000 feet above terrain, whichever is the higher	5 km	1 500 m horizontally 1 000 ft vertically
С	At and below 3,000 feet above MSL, or	5 km	1 500 m horizontally 1 000 ft vertically
FG	1,000 feet above terrain, whichever is the higher	5 km	Clear of cloud and with the surface in sight

Provided that the minima specified in Table 1 are not applicable when:

- (i) entering or leaving a CTR and the flight has received clearance from an ATSU to operate under Special VFR minima as prescribed in regulation 91.06.22; or
- (ii) entering or leaving an ATZ on a cross-country flight; and
- (iii) a pilot in the aircraft maintains two-way radio communication with the aerodrome control tower or aerodrome flight information service unit, in which case the pilot may leave or enter the aerodrome traffic zone when the ground visibility is equal to or greater than five km and the ceiling is equal to or higher than 500 feet.

(b) in the case of helicopters, under conditions of visibility and distance from cloud equal to, or greater than, those conditions specified in Tables 3 and 4:

Table 3

Airspace	Flight visibility	Distance from clouds	Ground visibility and ceiling
Control zones	2500m	Horizontally: 300 metres Vertically: Clear of cloud	Except when operating under a SVFR clearance no helicopter shall take-off from, land at, or approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than 2500 metres and the ceiling is less than 600 feet.
Within an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone)	2500m	Horizontally: 300 metres Vertically: Clear of cloud	No helicopter shall take-off from, land at, or approach to land at an aerodrome or fly within the aerodrome traffic zone when the ground visibility at the aerodrome concerned is less than 2500 m and the ceiling is less than 600 feet.

Table 4

In Airspaces other than those specified in Table 3

Airspace class	Altitude band	Flight visibility	Distance from cloud
CFG	At and above 10,000 feet above MSL	8 km	1 500 m horizontally 1 000 ft vertically
CFG	Below 10,000 ft AMSL and above 3,000 feet above MSL, or above 1,000 feet above terrain, whichever is the higher	5 km	1 500 m horizontally 1 000 ft vertically
С	At and below 3,000 feet above MSL, or 1,000 feet	2500m	1 500 m horizontally 1 000 ft vertically

FG	above terrain, whichever is the higher	1500m unless in accordance with (iii) below.	Clear of cloud and with the surface in sight
		with (iii)	

Provided that:

- (i) the limitations as contained in table 3 shall not prevent a helicopter from conducting hover-in-ground-effect or hover-taxi operations within the confines of a controlled aerodrome or heliport, if the visibility is not less than 100 m;
- (ii) the minima specified in table 3 are not applicable when a helicopter is entering or leaving a CTR or ATZ and the flight has received clearance from an ATSU to operate under Special VFR minima as prescribed in regulation 91.06.22; and
- (iii) helicopters shall be permitted to operate in less than 1 500 m flight visibility outside of controlled airspace, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.
- (2) VFR flight is not permitted
 - (a) at transonic or supersonic speed; or
 - (b) in Class A airspace.

Special VFR weather minima

- **91.06.22** (1) A PIC of an aeroplane may only conduct Special VFR operations in weather conditions below the conditions prescribed in regulation 91.06.21 within a control zone (CTR)
 - (a) under the terms of an air traffic control clearance;
 - (b) by day only;
 - (c) with a cloud ceiling of at least 600 feet and visibility of at least 1 500m, measured from the aerodrome reference point;
 - (d) when the Special VFR flight will not unduly delay an IFR flight;
 - (e) if the aeroplane is equipped with two way radio equipment capable of communicating with an ATSU on the appropriate frequency; and
 - (f) if leaving the control zone, in accordance with instructions issued by an ATSU prior to departure.
- (2) A PIC of a helicopter may only conduct Special VFR operations in weather conditions below the conditions prescribed in regulation 91.06.21 within a CTR or ATZ
 - (a) under the terms of an air traffic control clearance;

- (b) (i) by day; or
 - (ii) by night with a cloud ceiling of at least 300 feet;
- (c) when clear of clouds;
- (d) with a forward flight visibility of at least 800 metres;
- (e) if the helicopter will be operated at such a speed that the pilot has adequate opportunity to observe any obstructions or other traffic in sufficient time to avoid collisions;
- (f) if the flight can be conducted in accordance with regulation 91.06.32 with regard to minimum heights; and
- (g) when the Special VFR flight will not unduly delay an IFR flight.

VFR flight determination and weather deterioration

- **91.06.23** (1) The PIC of an aircraft operating outside a control zone or an aerodrome traffic zone is responsible toascertainwhether or not weather conditions permit flight in accordance with VFR.
- (2) Whenever weather conditions do not permit a pilot to maintain the minimum distance from cloud and the minimum visibility required by VFR, the pilot shall
 - (a) if in controlled airspace, request an amended clearance enabling the aircraft to continue in VMC to the nearest suitable aerodrome, or to leave the airspace within which an ATC clearance is required;
 - (b) if no clearance in accordance with paragraph (a) can be obtained, continue to operate in VMC and land at the nearest suitable aerodrome, notifying the appropriate ATC unit of the action taken;
 - (c) if operating within a control zone, request authorization to operate as a special VFR flight; or
 - (d) request clearance to operate in accordance with the IFR.

Division Three: Instrument Flight Rules

Compliance with IFR

91.06.24 A flight conducted above flight level 200 shall be flown in compliance with IFR as prescribed in this Subpart.

Aircraft equipment

91.06.25 Aircraft shall be equipped with suitable instruments and radio navigation apparatus appropriate to the route to be flown and in accordance with the provisions of Subpart 5.

Change from IFR flight to VFR flight

- **91.06.26** (1) The PIC of an aircraft who elects to change the conduct of flight of the aircraft from compliance with IFR to compliance with VFR shall, if a flight plan was submitted for the flight, notify the ATSU concerned that the IFR flight is cancelled and communicate to such ATSU the intended changes to be made to the current flight plan.
- (2) When an aircraft operating under IFR is flown in or encounters VMC, the PIC shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period in uninterrupted VMC.

IFR procedures

- **91.06.27** (1) Unless otherwise authorised by the responsible ATSU, aircraft flown in compliance with the rules contained in this Division, shall comply with IFR procedures applicable in the relevant airspace.
- (2) Unless otherwise authorized by the appropriate ATS authority, or directed by the appropriate air traffic control unit, controlled flights shall, insofar as practicable
 - (a) when on an established ATS route, operate along the defined centre line of that route; or
 - (b) when on any other route, operate directly between the navigation facilities and/or points defining that route.
- (3) An aircraft operating along an ATS route segment defined by reference to VHF omnidirectional radio ranges shall change over for its primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the changeover point, where established.
- (4) Subject to the provisions of regulation 91.06.25, the PIC of an aircraft may execute, or endeavour to execute, a cloud-break or let-down procedure at an aerodrome or nominate an aerodrome as an alternate aerodrome: Provided that the requirements relating to cloud-break or let-down procedures and to flights under IMC, as published by the Director in the NOTAM, can be complied with.

Division Four: Specific Provisions Regarding Aircraft

Foreign military aircraft

91.06.28 No foreign military aircraft shall fly over or land in the Republic except on the express invitation or with the express permission of the Minister, but any such aircraft so flying over or landing in the Republic shall be exempt from these Regulations to such extent and on such conditions as are specified in the invitation or permission.

Identification and interception of aircraft

- **91.06.29** (1) No person shall institute in-flight surveillance against, give an interception signal in connection with or give an instruction to land to a civilian aircraft suspected to be in contravention of the Act except
 - (a) on instruction by the Minister, the Director, an authorized officer or authorized person; or
 - (b) if the person is a member of the South African Police Services or South African National Defence Force, acting within the course and scope of his or her duties; and
 - (c) the in-flight surveillance, interception signal or instruction to land is in the public interest.
- (2) The in-flight surveillance, interception signal or instruction to land must be executed in a manner that does not unduly affect aviation safety.
- (3) The intercepted aircraft must follow out the instructions of the intercepting aircraft as prescribed in Document SA-CATS 91.
- (4) When the aircraft is intercepted, the pilot-in command (PIC) must immediately establish radio contact with the intercepting aircraft on 121,5 MHz.
- (5) If the intercepting aircraft cannot establish radio contact with or contact in any other practical way the intercepted aircraft, visual signals as prescribed in Document SA-CATS 91 must be used.
- (6) The PIC of anaircraft flying in South African airspace when intercepted shall comply with the procedures specified in this regulation.
- (7) The PIC of an aircraft flying in foreign airspace when intercepted shall comply with the interception procedures of that country.

Division Five: Air Traffic Rules

ATS procedures

91.06.30 The PIC of an aircraft to be operated in controlled airspace shall –

- (a) ensure that an ATS flight plan is submitted and changes thereto are notified as prescribed in regulation 91.03.4;
- (b) ensure that radio contact is established with the responsible ATSU and that radio communication is maintained as prescribed in regulation 91.06.16 except where such communication is accomplished using air data link; and
- (c) for flight in controlled airspace, obtain and comply with air traffic control clearances and instructions: Provided that
 - (i) the PIC of an aircraft may deviate from an air traffic control clearance in exceptional circumstances, but such deviation shall be reported to the responsible ATSU as soon as possible; and

(ii) the PIC of an aircraft may propose an amendment to an air traffic control clearance, but such amendment shall not be applied until acceded to by the responsible ATSU.

Priority

- **91.06.31** (1) An ATSU may, with regard to arrivals and departures, give priority to aircraft operating in accordance with ATS flight plan clearance over aircraft not so engaged.
- (2) However, an ATSU shall give priority to certain flights regardless of whether such flight is operating on an ATS flight plan or not, if the PIC has notified the ATSU that
 - (a) the aircraft is in a state of emergency, or the PIC has declared a distress or MAYDAY situation; or
 - (b) the PIC has declared an urgency or PAN situation; or
 - (c) the PIC has stated that there is a critically ill person on board the aircraft, or the flight is operated as an emergency air ambulance flight and the type of flight has been annotated accordingly in the flight plan; or
 - (d) the PIC has declared that the aircraft is in a state of minimum fuel.
 - (3) An ATSU shall, with regard to flight operations and provided that there is no priority in force in terms of sub-regulation (2), give priority to aircraft -
 - (a) engaged in the transportation of the President or Deputy President; or
 - (b) engaged in the transportation of any visiting Head of State or foreign government official recognised by the South African government as qualifying for priority services; or
 - (c) engaged in operations related to national security, humanitarian emergencies, public safety emergencies or any other operation that the Director authorises as qualifying for priority services.
 - (4) An aerodrome operator shall, with regard to arrivals, departures and passenger movements and provided that there is no priority in force in terms of sub-regulation (2), give priority to aircraft -
 - (a) engaged in the transportation of the President or Deputy President; or
 - (b) engaged in the transportation of any visiting Heads of State or foreign government official recognised by the South African government as qualifying for priority services; or
 - (c) engaged in operations related to national security, humanitarian emergencies, public safety emergencies or any other operation that the Director authorises as qualifying for priority services.
 - (5) Whenever an aircraft has requested a clearance involving priority in terms of subregulations (2), (3) or (4), a report explaining the necessity for such priority shall be submitted by the pilot-in command if requested by the Director, the appropriate ATSU or the appropriate airfield operator.

Division Six: Heights and Instrument Approach and Departure Procedures

Minimum heights

- **91.06.32** (1) Except when necessary for taking off, or landing, or except with prior written approval of the Director, no aircraft
 - (a) shall be flown over congested areas or over an open-air assembly of persons at a height less than 1 000 feet above the highest obstacle, within a radius of 2 000 feet from the aircraft:
 - (b) when flown elsewhere than specified in paragraph (a), shall be flown at a height less than 500 feet above the ground or water, unless the flight can be made without hazard or nuisance to persons or property on the ground or water and the PIC operates at a height and in a manner that allows safe operation in the event of an engine failure; and
 - (c) shall circle over or do repeated overflights over an open-air assembly of persons at a height less than 3 000 feet above the surface.
- (2) A helicopter shall be permitted to be flown at heights less than those prescribed in sub-regulation (1)(a), provided that—
 - (a) the operation is conducted without hazard to persons and property on the ground or water; and
 - (b) the PIC operates at a height and in a manner that allows safe operation in the event of an engine failure.
- (3) Except when necessary for take-off or landing, or with the express permission of the Director, an aircraft shall at night, in IMC or when operated in accordance with IFR, be flown
 - (a) at a height of at least 1 000 feet above the highest terrain or obstacle where the height of such terrain or obstacle does not exceed 5 000 feet above sea level within five nautical miles of the aircraft in flight; or
 - (b) at a height of at least 2 000 feet above the highest terrain or obstacle located within five nautical miles of the aircraft in flight where the height of such terrain or obstacle exceeds 5 000 feet above sea level: Provided that within areas determined by the Director the minimum height may be reduced to 1 000 feet above the highest terrain or obstacle located within 5 nautical miles of the aircraft in flight, and provided furthermore that the aircraft is flown in accordance with such procedures as the Director may determine.
- (4) The PIC of an aircraft shall, in addition to the requirements of this regulation, comply with any altitude restrictions prescribed for the area or route to be operated within or over.

Semi-circular rule

- **91.06.33** (1) Unless otherwise directed by an ATSU, the PIC of an aircraft in level flight shall fly at an altitude or flight level, as appropriate, selected according to magnetic track from the table as prescribed in Document SA-CATS 91.
- (2) Aircraft flown in accordance with VFR at a height of less than 1 500 feet above the surface, shall not be required to comply with the provisions of sub-regulation (1), unless if otherwise directed by an ATSU.

(3) A flight conducted from flight level 200 and above, shall be flown in compliance with IFR.

Aerodrome approach and departure procedures

- **91.06.34** (1) When an instrument approach to, or instrument departure from, an aerodrome is necessary, the PIC of an aircraft shall use the instrument approach and departure procedure as published by the Director in the AIC, IAIP, IAIP Supplement or NOTAM or otherwise approved by the Director.
- (2) No person flying an aircraft may execute, or endeavour to execute an instrument approach or instrument departure at an aerodrome unless
 - (a) the provisions of regulation 91.06.25 are complied with;
 - (b) the flight is conducted in accordance with procedures for instrument approach or instrument departure authorised by the Director for the specific aerodrome and manoeuvre to be executed;
 - (c) the requirements for flights conducted under IMC authorised by the Director are complied with; and
 - (d) where applicable, has received a clearance for the approach from the relevant air traffic services unit.
- (3) No PIC of an aircraft under IFR may nominate an aerodrome as an alternate aerodrome unless
 - (a) there is a procedure for an instrument approach authorised by the Director, if the forecast for the alternate is IMC;
 - (b) the aircraft complies with the requirements of regulation 91.06.25; and
 - (c) there is reasonable certainty that the requirements for flights conducted under IMC will be complied with.

SUBPART 7: FLIGHT OPERATIONS

Routes and areas of operation

91.07.1 The owner or operator of an aircraft shall ensure that –

- (a) operations are only conducted along such routes or within such areas, for which approval or authorisation has been obtained, where required, from the appropriate authority concerned;
- (b) all flights are planned and conducted in accordance with any mandatory routings that have been published for any airspace being operated in, unless otherwise authorised in an air traffic control clearance;
- (c) the performance of the aircraft intended to be used, is adequate to comply with minimum flight altitude requirements; and

(d) the instruments and equipment of the aircraft intended to be used, comply with the minimum requirements for the planned operation and will enable the flight crew to control the flight path of the aircraft, carry out any required procedural manoeuvres and observe the operating limitations of the aircraft in the expected operating conditions.

Minimum flight altitudes

- **91.07.2** (1) No pilot shall operate an aircraft at altitudes below
 - (a) altitudes, established by the owner or operator, which provide the required terrain clearance, taking into account the operating limitations referred to in Subpart 8; and
 - (b) the minimum altitudes referred to in Subpart 6;

except when necessary for take-off and landing.

- (2) The method of establishing minimum flight altitudes referred to in sub-regulation (1)(a) is prescribed in Document SA-CATS 91.
- (3) Where the minimum flight altitudes established by the appropriate authority of a foreign State are higher than the minimum flight altitudes prescribed in this regulation, the minimum flight altitudes established by such appropriate authority shall apply in respect of a South African registered aircraft flying in the airspace of the foreign State concerned.

Use of aerodromes

- **91.07.3** (1) No pilot shall use, and no owner or operator shall authorise the use of, an aerodrome as a destination or alternate destination aerodrome, unless such aerodrome is adequate for the type of aircraft and operation concerned.
- (2) Except in an emergency, no pilot of an aircraft shall take-off or land by night, unless the place of take-off or landing is equipped with night flying facilities.

Helicopter landings and take-offs

- **91.07.4** (1) No pilot of a helicopter shall land at or take-off from any place unless the place is so situated to permit the helicopter, in the event of an emergency arising during such landing or take-off, to land without undue hazard to persons or property on the surface.
- (2) No pilot of a helicopter shall land on, or take-off from, any building, structure or place in the area of jurisdiction of a local government, unless such building, structure or place has been approved for the purpose by the Director: Provided that this restriction shall not apply
 - (a) to a helicopter landing on, or taking off from, a building, structure or place within an industrial area, a commercial warehouse area or an open farm land which is suitable for such purposes and in respect of which helicopter the PIC is the holder of a valid CPL or ATPL (helicopter) or, in the case of the holder of a PPL (helicopter), with the written permission of the Director, unless specifically prohibited by the local government; or
 - (b) to a helicopter engaged in an emergency medical service operation referred to in Part 138, or undertaking of a flight necessary for the exercising of any power in terms of any law.

- (3) The PIC of a helicopter shall ensure that any place used for landing, take-off or hover –
- (a) shall have -
 - (i) physical characteristics;
 - (ii) obstacle limitation surfaces; and
 - (iii) visual aids,
 - commensurate with the ambient light conditions and the characteristics of the helicopter being operated;
- (b) allows the helicopter to operate clear of obstacles and without causing nuisance to third parties through its rotor wash; and
- (c) has a surface area suitable for touch-down and lift-off.
- (4) A local government may after consultation with the Director, extend the scope of the provisions of sub-regulation (2)(a) to include other places in its area of jurisdiction.
- (5) The Director may, in the interests of aviation safety, impose conditions or institute restrictions as to the use of any building, structure or place for the landing or take-off of helicopters, or require special flight procedures to be adopted at, or special routes to be followed to or from, such building, structure or place by helicopters, and the Director may impose different conditions, institute different restrictions or require different special flight procedures to be adopted in respect of different buildings, structures or places.
- (6) Nothing in this regulation shall be construed as conferring any right to land at any building, structure or place against the wishes of the owner of, or any other person who has an interest in, the building, structure or place or as prejudicing the rights or remedies of any person in respect of any injury to persons or property caused by the helicopter or its occupants.

Aerodrome operating minima

- **91.07.5** (1) No pilot of an aircraft shall use an aerodrome as a destination or alternate aerodrome, unless the operating minima for such aerodrome, established by the appropriate authority of the State in which the aerodrome is situated, can be complied with.
- (2) The aerodrome operating minima for a specific type of approach and landing procedure shall be applicable if
 - (a) the ground equipment shown on the respective instrument approach and landing chart required for the intended procedure, is operative;
 - (b) the aircraft systems required for the type of approach, are operative;
 - (c) the required aircraft performance criteria are complied with; and
 - (d) the flight crew is qualified to conduct the type of approach.
- (3) In determining or establishing the aerodrome operating minima applicable to any particular operation, the owner or operator shall take into account
 - (a) the type, performance and handling characteristics of the aircraft;

- (b) the composition of the flight crew, their competence and experience;
- (c) the surface condition, dimensions and characteristics of the runways or touch-down areas which may be selected for use;
- (d) the adequacy and performance of the available visual and non-visual ground aids;
- (e) the equipment available in the aircraft for the purpose of navigation or control of the flight path, as appropriate, during the take-off, approach, flare, landing or missed approach;
- (f) the obstacles in the approach and missed approach areas and the climb-out areas and necessary clearance;
- (g) the obstacle clearance altitude or height for the instrument approach procedures;
- (h) the means to determine and report meteorological conditions; and
- (i) the availability and adequacy of emergency services.
- (4) The aerodrome operating minima are those prescribed in Document SA-CATS 91 and no pilot shall conduct operations in weather conditions lower than such minima unless approved by the Director to do so.

Threshold crossing height

91.07.6 The PIC of an aircraft being used to conduct an instrument approach, shall ensure that the aircraft crosses the threshold by a safe margin and in the required landing configuration and attitude.

Pre-flight selection of aerodromes

- **91.07.7** (1) The owner or operator of an aircraft shall select destination or alternate aerodromes in accordance with regulation 91.07.5 when planning a flight.
- (2) The owner or operator shall select a departure, destination or alternate aerodrome only when the serviceability status of the aerodrome permits safe operation of the type of aircraft concerned.
- (3) The owner or operator shall select and specify in the ATS flight plan, a take-off alternate aerodrome, if it would not be possible for the aircraft to return to the aerodrome of departure due to meteorological or performance reasons.
- (4) The take-off alternate aerodrome referred to in sub-regulation (3), shall be located within
 - (a) twenty (20) minutes flying time from the departure aerodrome in the case of single-engine aircraft;
 - (b) except as provided in paragraph (c), one hour flight time at the one-engine cruising speed according to the AFM in still-air standard conditions based on the actual take-off mass for a twin-engine aircraft;

- (c) for aeroplanes authorized for ETOPS under Parts 93, 121 or 135, the approved ETOPS diversion time, up to a maximum of two hours of flight time, subject to any MEL restriction, at the published one-engine-inoperative cruising speed in still-air standard conditions based on the actual take-off mass; or
- (d) two hours flight time at one-engine inoperative cruising speed according to the AFM referred to in regulation 91.03.2, in still-air standard conditions based on the actual take-off mass for three-engine and four-engine aircraft:

Provided that if the AFM does not contain a one-engine inoperative cruising speed as referred to in paragraphs (b) and (c), the speed to be used for calculation shall be the speed which is achieved with the remaining engine or engines set at maximum continuous power.

- (5) The owner or operator of a helicopter shall select at least one destination alternate aerodrome for each IFR flight, unless the meteorological conditions prevailing are such that, for the period from one hour before until one hour after the expected time of arrival at the destination aerodrome, the approach from the minimum sector safe altitude and landing can be made in VMC.
- (6) The owner or operator of an aeroplane shall select at least one destination alternate aerodrome for each IFR flight unless
 - (a) the meteorological conditions prevailing are such that, for the period from one hour before until one hour after the expected time of arrival at the destination aerodrome, the approach from the minimum sector safe altitude and landing can be made in VMC; or
 - (b) the destination aerodrome is isolated and no adequate destination alternate aerodrome exists, and
 - (i) a standard instrument approach procedure is prescribed for the aerodrome of intended landing and the associated navigation aids will be functional from two hours before time of arrival; and
 - (ii) for aeroplanes, available current meteorological information indicates that the following meteorological conditions will exist from two hours before time of arrival
 - (aa) a cloud base of at least 1 000 ft above the minimum associated with the instrument approach procedure; and
 - (bb) visibility of at least 5.5 km or of 4 km more than the minimum associated with the procedure, whichever is greater.
- (7) Except as provided in sub-regulations (10) and (13), when planning a flight, the owner or operator shall only select an aerodrome as a destination or alternate aerodrome if the appropriate weather reports or forecasts, or a combination thereof, are at or above the applicable planning minima for a period of one hour before to one hour after the estimated time of arrival of the aircraft at the aerodrome.
- (8) The owner or operator of a helicopter shall select at least one destination alternate aerodrome for each IFR flight unless –

- (a) available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the estimated time of arrival, or from the actual time of departure to two hours after the estimated time of arrival, whichever is the shorter period –
 - (i) a cloud base of at least 400 ft above the minimum associated with the instrument approach procedure; and
 - (ii) visibility of at least 1.5 km more than the minimum associated with the procedure. or
- (b) the heliport of intended landing is isolated and no suitable alternate is available and
 - (i) an instrument approach procedure is prescribed for the isolated heliport of intended landing; and
 - (ii) a point of no return (PNR) is determined in case of an offshore destination.
- (9) Suitable offshore alternates for helicopters may be specified subject to the following –
- (a) the offshore alternates shall be used only after passing a PNR. Prior to a PNR, onshore alternates shall be used;
- (b) mechanical reliability of critical control systems and critical components shall be considered and taken into account when determining the suitability of the alternate;
- (c) one-engine inoperative performance capability shall be attainable prior to arrival at the alternate;
- (d) to the extent possible, deck availability shall be guaranteed; and
- (e) weather information must be reliable and accurate.
- (10) The owner or operator of an aircraft shall select two destination alternate aerodromes for IFR flights when the appropriate weather reports or forecasts for the destination aerodrome, or any combination thereof, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions will be below the applicable planning minima or no weather information is available at the destination aerodrome.
- (11) The owner or operator of an aircraft shall specify the destination alternate aerodrome, if required, in the ATS flight plan referred to in regulation 91.03.3.
- (12) The owner or operator shall specify *en route* alternate aerodromes for extended-range operations with twin-engine aeroplanes and shall specify such *en route* alternate aerodromes in the ATS flight plan referred to in regulation 91.03.4.
- (13) In addition to the provisions of sub-regulation (10), an owner or operator may conduct a flight in accordance with IFR to a destination for which there is no aviation weather report or forecast available: Provided the requirements specified in Document SA-CATS 91 are met.

Planning minima for IFR flights

- **91.07.8** (1) The owner or operator of an aircraft shall not select an aerodrome as a take-off alternate aerodrome for a flight to be conducted, wholly or partly in accordance with IFR under IMC unless the appropriate weather reports or forecasts, or any combination thereof, indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the applicable landing minima prescribed in regulation 91.07.5.
- (2) The ceiling shall be taken into account when the only approaches available are non-precision or circling approaches.
 - (3) Any limitation related to one-engine inoperative operations shall be taken into account.
- (4) Except as provided in regulation 91.07.7(13), the owner or operator of an aircraft shall only select the destination aerodrome or destination alternate aerodrome, if required, if the appropriate weather reports or forecasts, or any combination thereof, indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at, or above, the applicable planning minima as follows
 - (a) planning minima for a destination aerodrome
 - (i) RVR or visibility specified in accordance with regulation 91.07.5; and
 - (ii) for non-precision approach or a circling approach, the ceiling at, or above, MDA/H; and
 - (b) planning minima for a destination alternate aerodrome shall be as prescribed in Document SA-CATS 91.
- (5) The owner or operator of an aircraft shall not select an aerodrome as an *en route* alternate aerodrome unless the appropriate weather reports or forecasts, or any combination thereof, indicate that, during a period commencing one hour before and ending one hour after the estimated time of arrival at the aerodrome, the weather conditions will be at or above the planning minima as prescribed in Document SA-CATS 91.

Meteorological conditions

- **91.07.9** (1) On a flight to be conducted in accordance with IFR, the pilot shall not
 - (a) commence take-off; or
 - (b) continue beyond the in-flight decision point.

unless information is available indicating that conditions will, at the estimated time of arrival of such aircraft, be at, or above, the applicable aerodrome operating minima –

- (i) at the destination aerodrome; or
- (ii) where a destination alternate aerodrome is required, at the destination aerodrome and one destination alternate aerodrome or at two destination alternate aerodromes.

(2) On a flight conducted in accordance with VFR, the pilot shall not commence take-off unless current meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under VFR, shall, at the appropriate time, be such as to render compliance with the provisions prescribed in this Part possible.

VFR operating minima

- 91.07.10 The owner or operator of an aircraft shall ensure that
 - (a) VFR flights are conducted in accordance with the VFR prescribed in Subpart 6; and
 - (b) special VFR flights are not commenced when the visibility is less than the visibility prescribed in regulation 91.06.22(1).

Mass and balance

- **91.07.11** (1) The owner or operator of an aircraft shall ensure that, during any phase of the operation, the loading, mass and the centre of gravity of the aircraft complies with the limitations specified in the approved AFM referred to in regulation 91.03.2 or the operations manual if the limitations therein are more restrictive.
- (2) The owner or operator shall establish the mass and the centre of gravity of the aircraft by actual weighing prior to initial entry into operation and thereafter at intervals of five years.
- (3) The accumulated effects of modifications and repairs on the mass and balance of the aircraft, shall be accounted for and properly documented by the owner or operator.
- (4) The aircraft shall be weighed in accordance with the provisions of sub-regulation (2), if the effect of modifications on the mass and balance is not accurately known.
- (5) The owner or operator shall determine the mass of all operating items and flight crew members included in the dry operating mass of the aircraft, by weighing or by using the appropriate standard mass as prescribed in Document SA-CATS 91.
- (6) The influence of the mass of the operating items and flight crew members referred to in sub-regulation (5) on the centre of gravity of the aircraft shall be determined by the owner or operator of such aircraft.
- (7) The owner or operator shall establish the mass of the traffic load, including any ballast, by actual weighing, or determine the mass of the traffic load in accordance with the appropriate standard passenger and baggage mass as prescribed in Document SA-CATS 91.
- (8) The owner or operator shall determine the mass of the fuel load by using the actual specific gravity or, if approved by the Director, a standard specific gravity.

Fuel supply

91.07.12 (1) The pilot shall not commence a flight unless he or she is satisfied that the aircraft carries at least the planned amount of fuel to complete the flight safely, taking into account operating and meteorological conditions and the expected delays.

- (2) The PIC shall ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to an aerodrome or, in the case of a helicopter, a suitable landing place, where a safe landing can be made.
- (3) If the usable fuel on board the aircraft is less than the final reserve fuel, the PIC of such aircraft, shall
 - (a) in the case of an aeroplane, declare an emergency; or
 - (b) in the case of a helicopter, land as soon as possible.
- (4) The method of calculating the amount of fuel to be carried for each flight shall be as prescribed in Document SA-CATS 91.

Refuelling or defuelling with passengers on board

- **91.07.13** (1) Except as provided for in Parts 93, 121, 127 and 135, the owner or operator of an aircraft shall ensure that the aircraft is not refuelled or defuelled with aviation gasoline or wide-cut type fuel when passengers are embarking, on board or disembarking such aircraft.
- (2) In cases other than the cases referred to in sub-regulation (1), necessary precautions shall be taken and the aircraft shall be properly manned by qualified personnel ready to initiate and direct an evacuation of such aircraft by the most practical and expeditious means available.

Smoking in aircraft

- **91.07.14** (1) No person shall smoke in a South African registered aircraft or in any foreign registered aircraft when in or over the Republic.
- (2) In all South African registered aircraft, notices shall be displayed in a prominent place in the aircraft indicating that smoking is prohibited and that such notices are clearly visible to all passengers and flight crew members.

Instrument approach and departure procedures

- **91.07.15** (1) The owner or operator of an aircraft shall ensure that the instrument approach and departure procedures, established by the appropriate authority of the State in which the aerodrome to be used, is located, are used.
- (2) Notwithstanding the provisions prescribed in sub-regulation (1), a PIC may accept an air traffic control clearance to deviate from a published approach or departure route: Provided that
 - (a) obstacle clearance criteria are observed and full account is taken of the operating conditions; and
 - (b) the final approach is flown visually.
- (3) The owner or operator of an aircraft shall ensure that the appropriate temperature corrections to all published altitudes are applied when conducting approaches at an aerodrome in temperatures below standard.

Noise abatement procedures

91.07.16 No person shall operate an aircraft contrary to noise abatement procedures established for an aerodrome in terms of the provisions of the regulations of the State into or out of which the aircraft is being flown.

Submission of ATS flight plan

91.07.17 The owner or operator of an aircraft shall ensure that a flight is not commenced unless an ATS flight plan has been filed, or adequate information has been deposited in order to permit alerting services to be activated, if required.

Seats, safety belts and harnesses

- **91.07.18** (1) Before take-off and landing, and whenever deemed necessary in the interests of aviation safety, the PIC of an aircraft shall ensure that each person on board such aircraft occupies a seat or berth with his or her safety belt or harness, where provided, properly secured.
- (2) The PIC shall ensure that multiple occupancy of aircraft seats does not occur other than by one adult and one infant who is properly secured by a child restraint device.

Passenger seating

- **91.07.19** (1) The owner or operator of an aircraft shall ensure that passengers are seated where, in the event that an emergency evacuation is required, such passengers may best assist and not hinder evacuation from the aircraft.
- (2) The owner or operator of an aircraft shall ensure that if a disabled passenger is carried together with other passengers, such passenger shall not be positioned in such a way that access to emergency exits is blocked.
- (3) Passengers may be carried in an aircraft, other than an air ambulance aircraft operated and equipped in terms of Part 138, on a stretcher only if such stretcher and the manner in which it is secured to the aircraft have been approved by the Director and the condition of the passenger does not require the attention of an aviation health care provider or require the passenger to be connected to any external medical equipment.
- (4) In the case of an emergency medical situation, where no air ambulance aircraft operated and equipped in terms of Part 138 can be made available within a reasonable time span at or near the place where the situation exists, an aircraft owner or operator may disregard subregulations (1), (2) and (3) in the interest of saving human life.
- (5) Any non-standard emergency transport in terms of sub-regulation (4) shall be reported by the operator to the Director on the appropriate form as described in Document SA-CATS 138, explaining the reasons for the deviation from regulation 91.07.19, within fourteen days of the flight having taken place.

Passenger movements and briefing

- **91.07.20** (1) The owner or operator of an aircraft shall take reasonable steps to provide for the safe movement of his or her passengers to or from the aircraft while on the aerodrome movement area.
 - (2) The owner or operator of an aircraft shall ensure that –
 - (a) passengers are verbally briefed about safety matters, parts or all of which may be given by an audio-visual presentation; and
 - (b) in an emergency during flight, passengers are instructed in such emergency action as may be appropriate to the circumstances.
 - (3) The owner or operator shall ensure that, before take-off –
 - (a) passengers are briefed, to the extent applicable, on -
 - (i) the smoking prohibition;
 - (ii) when the back of the seat is to be in the upright position and the tray table stowed;
 - (iii) the location of emergency exits;
 - (iv) the location and use of floor proximity escape path markings;
 - (v) the stowage of carry-on baggage;
 - (vi) any restrictions on the use of portable electronic devices; and
 - vii) the location and the contents of the safety briefing card; and
 - (b) passengers receive, to the extent applicable, a demonstration of
 - (i) the use of safety belts or safety harnesses, including the manner in which the safety belts or safety harnesses are to be fastened and unfastened;
 - (ii) the location and use of oxygen equipment; and
 - (iii) the location and use of life jackets.
 - (4) The owner or operator shall ensure that, after take-off, passengers are reminded of –
 - (a) the smoking prohibition; and
 - (b) the use of safety belts or safety harnesses.
 - (5) The owner or operator shall ensure that, before landing, passengers are reminded of –
 - (a) the smoking prohibition;
 - (b) the use of safety belts or safety harnesses;
 - (c) when the back of the seat is to be in the upright position and the tray table stowed, if applicable;

- (d) the re-stowage of carry-on baggage; and
- (e) any restrictions on the use of portable electronic devices.
- (6) The owner or operator of an aircraft shall ensure that, after landing, passengers are reminded of
 - (a) the smoking prohibition while on board the aircraft and any prohibitions after disembarkment; and
 - (b) the use of safety belts or safety harnesses.

Passenger health and safety

- **91.07.21** (1) The PIC of an aircraft shall notify air traffic control or the South African Port Health Authority (PHA), as applicable, where it appears that any person displays the symptoms of a communicable disease as provided in Document SA-CATS 91.
- (2) Immediately upon landing, a report shall be made to the PHA containing the information contained in Document SA-CATS 91.

Emergency equipment

- **91.07.22** (1) The owner or operator of an aircraft shall ensure that emergency equipment, carried or installed in the aircraft in order to meet the requirements prescribed in this Part and the MEL, is in such condition that it will satisfactorily perform its design function.
- (2) The PIC of the aircraft shall ensure that the emergency equipment concerned remains easily accessible for immediate use by the flight crew.

Illumination of emergency exits

- **91.07.23** When an aircraft, which is equipped with an emergency lighting system is in flight and below 1 000 feet above ground level, or on the ground with passengers on board
 - (a) the emergency lighting system shall be switched on; or
 - (b) the normal cabin lighting system shall be switched on and the emergency lighting shall be armed.

Use of supplemental oxygen

- **91.07.24** (1) The PIC of an aircraft shall ensure that flight crew members engaged in performing duties essential to the safe operation of an aircraft in flight, use supplemental oxygen
 - (a) continuously when the flight deck pressure altitude exceeds 10 000 feet for more than 120 minutes intended flight time, and
 - (b) at all times when the flight deck pressure altitude exceeds 12 000 feet.

(2) The PIC of an aircraft shall ensure that when a flight is conducted above FL 410, at least one pilot at a pilot station wears an oxygen mask when the other pilot leaves the flight deck for any reason.

Approach and landing conditions

91.07.25 Before commencing an approach to land, the PIC of an aircraft shall satisfy himself or herself that, according to the information available to him or her, the weather at the aerodrome and the condition of the runway or touch-down area intended to be used, will not prevent a safe approach, landing or missed approach, having regard for the performance information contained in the AFM referred to in regulation 91.03.2 or similar document.

Approach ban

- **91.07.26** (1) Except as provided for in sub-regulation (3), when operating in IMC and in accordance with IFR, the PIC of an aircraft may commence an approach regardless of the reported RVR or visibility, but the approach shall not be continued beyond the FAF or equivalent published position, or, in the case of a non-precision approach, below 1 000 feet above the aerodrome, unless the reported RVR or visibility for the runway or touch-down area is equal to, or better than, the applicable operating minima.
- (2) Where RVR is not available, the PIC may derive an RVR value by converting the reported visibility in accordance with the provisions as prescribed in section 8 of technical standard 91.07.5 of Document SA-CATS 91.
 - (3) The PIC may continue the approach to DA/H or MDA/H if –
 - (a) at the time the RVR report is received, the aircraft has passed the FAF inbound or, where there is no FAF, the point where the final approach course is intercepted or, in the case of a non-precision approach, below 1 000 feet above the aerodrome;
 - (b) the aircraft is on a training flight where a landing is not intended and the appropriate air traffic control unit is informed that a missed approach procedure will be initiated at or above the decision height or minimum descent altitude, as appropriate; or
 - (c) the RVR is varying between distances less than and greater than the minimum RVR.
- (4) The PIC may continue the approach below DA/H or MDA/H and the landing may be completed: Provided that the required visual reference is established at the DA/H or MDA/H and is maintained.
- (5) Where no FAF or equivalent published position exists for a precision approach, the PIC shall decide whether to continue or abandon the approach before descending below 1 000 feet above the aerodrome on the final approach segment.

In-flight testing on passenger- and cargo-carrying flights

91.07.27 The owner or operator of an aircraft, when passengers or cargo are on board such aircraft, shall ensure that no person –

- (a) simulates emergency situations in the aircraft affecting the flight characteristics of such aircraft;
- (b) conducts flight testing for the initial skills test or renewal of an instrument rating;
- (c) conducts any flight or skills test other than a route proficiency test; or
- (d) conducts any skills test for a class or type rating.

Turning helicopter rotors

- **91.07.28** (1) Except as provided for in sub-regulation (2), no person engaged in helicopter operations shall permit helicopter rotors to be turned under power without a qualified pilot at the controls of such helicopter.
- (2) A licensed AME, who has undergone instruction from a qualified Grade II or higher qualified helicopter flight instructor on the ground-running of the relevant helicopter type, and thereafter has been certified as competent to undertake such a task by the instructor in his or her AME's Record of Experience (TV2/308), may turn helicopter rotors under power for the purposes of blade tracking on condition that
 - (a) the collective has been locked in the down position; and
 - (b) ground-runs are carried out when the helicopter is stationary, and wind conditions do not require major cyclic inputs.

Starting and running of engines

- **91.07.29** (1) Except when the brakes are serviceable and are fully applied, chocks shall be placed in front of the wheels of an aeroplane before starting the engine or engines, and a competent person shall be seated at the controls when the engine or engines are running.
- (2) Where the pilot of an aeroplane is the only person present and it has been necessary for chocks to be used, he or she shall ensure that the chocks are removed prior to starting the engine, unless the aircraft is equipped with a parking brake, in which case the parking brake shall be set before the pilot removes the chocks.
- (3) Except as provided in sub-regulation (2), when the engines are running, at least one pilot seat of an aircraft shall be attended by a person qualified to occupy the pilot seat.

Acrobatic flights

- **91.07.30** (1) No aircraft shall be flown acrobatically so as to endanger air traffic.
- (2) Except by individual permission from the Director, aircraft shall not be flown acrobatically
- (a) unless the manoeuvre can be concluded and the aircraft brought on an even keel at a height of not less than 2 000 feet above the ground or water;
- (b) within a five nautical mile distance of an aerodrome reference point of an aerodrome licensed and approved in terms of Part 139 unless at a height not less than 4 000 feet above ground level;

- (c) in the vicinity of air traffic services routes; or
- (d) over any populous area or public gathering.

Simulated instrument flight in aircraft

- **91.07.31** (1) The owner or operator of an aircraft shall ensure that no person operates the aircraft in simulated instrument flight in VMC unless
 - (a) the other aircraft control seat is occupied by a safety pilot who possesses at least a PPL with category and class ratings appropriate to the aircraft being flown;
 - (b) the safety pilot has adequate vision forward and to each side of the aircraft, or there is a competent observer in the aircraft who adequately supplements the vision of the safety pilot; and
 - (c) except in the case of lighter-than-air aircraft, the aircraft is fitted with fully functioning dual controls: Provided that simulated instrument flight may be conducted in a single-engine aircraft, equipped with a single, functioning throw-over control wheel in place of fixed dual controls of the elevator and ailerons, when
 - (i) the safety pilot has determined that the flight can be conducted safely; and
 - (ii) the person manipulating the controls has at least a PPL with appropriate category, class and type ratings.
- (2) When simulated instrument flight is being practised by a pilot, at least one of the two pilots shall hold the appropriate valid type rating in respect of the aircraft being flown and shall act as the PIC.
- (3) When a simulated instrument flight takes place at night in VMC, the safety pilot shall be the holder of a valid instrument rating.
- (4) When simulated instrument flight is being practised for the purpose of obtaining an instrument rating, the safety pilot shall be an appropriately rated flight instructor.

Aeroplane operating procedures

91.07.32 Unless otherwise specified in an air traffic control instruction, the PIC of an aircraft shall climb or descend to an assigned altitude or flight level at a rate less than 1 500 ft/min throughout the last 1 000 ft of climb or descent to the assigned altitude or flight level.

Head-up displays and enhanced vision systems

91.07.33 No owner or operator shall use a head-up display or enhanced vision system while operating in accordance with the IFR unless he or she meets the requirements specified in Document SA-CATS 91 and is approved to do so by the Director.

Electronic flight bags

91.07.34 No owner or operator shall use an electronic flight bag unless he or she meets the requirements specified in Document SA-CATS 91 and is approved to do so by the Director.

SUBPART 8: PERFORMANCE OPERATING LIMITATIONS

General provisions

- **91.08.1** (1) The owner or operator of an aircraft shall ensure that, under all conditions that could reasonably be expected to be encountered, the aircraft is operated in compliance with
 - (a) the terms and conditions of the certificate of airworthiness and AFM issued in respect of such aircraft:
 - (b) the operating limitations, the markings and placards as prescribed by the appropriate authority of the State of Registry; and
 - (c) the mass limitations prescribed in Part 21 or as imposed by compliance with the applicable noise certification standards under which the aircraft was certified unless otherwise authorized in exceptional circumstances by the competent authority of the State in which the aerodrome is situated for a certain aerodrome or a runway where there is no noise disturbance problem.
- (2) In complying with sub-regulation (1), the owner or operator shall take account of airframe configuration, environmental conditions and the operation of systems which may have an effect on the performance of the aircraft, when appropriate, including aircraft mass, operating procedures, the pressure altitude appropriate to the elevation of the aerodrome, temperature, wind, runway gradient and condition of runway.
- (3) The operator of an aircraft engaged in a commercial air transport operation, shall comply with the provisions of the appropriate regulations in Part 121, Part 127 or Part 135, as the case may be.

Helicopter operating limitations

- **91.08.2** (1) Except as provided in Part 127, performance Class 3 helicopters shall only be operated in conditions of weather and light, and over such routes and diversions therefrom, which may permit a safe forced landing to be executed in the event of an engine failure.
- (2) The provisions of sub-regulation (1) shall apply to performance Class 2 helicopters prior to the take-off decision point or after passing the landing decision point.
- (3) Only performance Class 1 helicopters shall be permitted to operate from elevated heliports in built-up urban areas.

Helicopter performance classification

- **91.08.3** For performance purposes, helicopters are classified as follows:
 - (a) Class 1 helicopter a helicopter with performance such that, in case of critical power unit failure, the helicopter is able to safely continue the flight to an appropriate landing, unless the failure occurs prior to reaching the take-off decision point or after passing the landing decision point, in which cases the helicopter must be able to land within the rejected take-off or landing area;

- (b) Class 2 helicopter a helicopter with performance such that, in case of critical power unit failure, the helicopter is able to safely continue the flight, except when the failure occurs early during the take-off manoeuvre or late in the landing manoeuvre, in which case a forced landing may be required; and
- (c) Class 3 helicopter a helicopter with performance such that, in case of power unit failure at any point in the flight profile, a forced landing has to be performed.

Aeroplane performance classification

- 91.08.4 For performance purposes, aeroplanes are classified as follows -
 - (a) Class A aeroplanes -
 - (i) multi-engine aeroplanes powered by turbo-propeller engines with a maximum certificated mass exceeding 5 700 kilograms; and
 - (ii) multi-engine turbojet-powered aeroplanes;
 - (b) Class B aeroplanes propeller-driven aeroplanes, other than single-engine aeroplanes, with a MCM of 5 700 kilograms or less;
 - (c) Class C aeroplanes aeroplanes powered by two or more reciprocating engines with a MCM exceeding 5 700 kilograms; and
 - (d) Class D aeroplanes single-engine aeroplanes.

Performance limitations Class A and Class C aeroplanes

- **91.08.5** (1) No owner or operator of a Class A or C aeroplane shall start a take-off unless the aeroplane is able, in the event of a critical power-unit failing at any point in the take-off, either to discontinue the take-off and stop within either the accelerate-stop distance available or the runway available, or to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to safely transition to the *en route* phase of flight.
- (2) The adequate margin referred to in sub-regulation (1) shall be determined as prescribed in Document SA-CATS 91.
- (3) For the purposes of sub-regulation (1), in determining the length of the runway available, account shall be taken of the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.
- (4) No owner or operator of a Class A or C aeroplane shall operate such aeroplane unless it is able, in the event of the critical engine becoming inoperative at any point along the route or planned diversions there from, to continue the flight to an aerodrome at which the requirements of sub-regulation (5) can be met, without flying below the minimum obstacle clearance altitude at any point.
- (5) No owner or operator of a Class A or C aeroplane shall operate such aeroplane unless it is able, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land, with assurance that it can

come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available. Allowance shall be made for expected variations in the approach and landing techniques, if such allowance was not made during the establishment of the aeroplane's performance data.

- (6) An owner or operator may, in meeting the requirements of sub-regulations (4) and (5), make allowance for normal fuel consumption and if applicable, the ability to jettison fuel *en route*.
- (7) An owner or operator of aeroplanes without approved performance data may submit an alternative means of meeting the requirements of sub-regulations (1), (4) and (5) to the Director for approval.

SUBPART 9: MAINTENANCE

General

- **91.09.1** (1) No owner, operator or pilot of an aircraft shall operate the aircraft unless such aircraft is maintained and released to service in accordance with the provisions of Part 24 or Part 43, as applicable to the aircraft.
- (2) An owner or operator may assign the responsibility for the maintenance and release of his or her aircraft to an approved maintenance organisation by means of a written agreement.

Aeroplane maintenance programme

91.09.2 Each owner or operator shall ensure that the aeroplane is maintained in accordance with an aeroplane maintenance programme as specified in Document SA-CATS 43 or Document SA-CATS 24, as applicable.

Maintenance responsibilities

- **91.09.3** (1) The owner or operator of an aircraft, or maintenance organisation so assigned in accordance with regulation 91.09.01(2), shall ensure that, in accordance with procedures acceptable to the Director
 - (a) the aircraft is maintained in an airworthy condition;
 - (b) the operational and emergency equipment necessary for an intended flight is serviceable; and
 - (c) the certificate of airworthiness or authority to fly, as applicable, of the aircraft remains valid.
- (2) The owner or operator shall not operate the aircraft unless it is maintained and released to service under a system acceptable to the Director.
- (3) When the maintenance release is not issued by an approved maintenance organization in accordance with the provisions of Part 145, the person signing the maintenance release shall be licensed in accordance with the provisions of Part 66.

(4) The owner or operator shall ensure that the maintenance of the aircraft is performed in accordance with a maintenance programme acceptable to the Director.

Maintenance records

- **91.09.4** (1) The owner or operator of an aircraft, or maintenance organisation so assigned in accordance with regulation 91.09.01(2), shall ensure that the following records are kept for the periods mentioned in sub-regulation (2)
 - (a) the total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components;
 - (b) the current status of compliance with all applicable mandatory continuing airworthiness information;
 - (c) appropriate details of modifications and repairs;
 - (d) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aircraft or its components subject to a mandatory overhaul life;
 - (e) the current status of the aircraft's compliance with the maintenance programme; and
 - (f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
- (2) The records in sub-regulations (1)(a) to (e) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service and the records in sub-regulation (1)(f) for a minimum period of one year after the signing of the maintenance release.
- (3) In the event of a temporary change of owner or lessee, the records shall be made available to the new owner or lessee. In the event of any permanent change of owner or lessee, the records shall be transferred to the new owner or lessee.

Modifications and repairs

91.09.5 All modifications and repairs shall comply with airworthiness requirements acceptable to the Director. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

Maintenance release

- **91.09.6** (1) A maintenance release shall be completed and signed, as prescribed by the Director, to certify that the maintenance work performed has been completed satisfactorily and in accordance with data and procedures acceptable to the Director.
 - (2) A maintenance release shall contain a certification including –
 - (a) basic details of the maintenance performed;
 - (b) the date such maintenance was completed;

- (c) when applicable, the identity of the approved maintenance organization;
- (d) the identity of the authorized person or persons signing the release;
- (e) the expiry date of the release where a calendar limit exists;
- (f) the hours at which the release will expire;
- (g) if the maintenance program makes provision for such, the hours or time by which the inspection may be extended.
- (3) An owner shall, notwithstanding an extension as contemplated in sub-regulation (2)(g), ensure that a maintenance release remains valid by meeting the requirements of sub-regulation (2)(d) and (e) or (f), as applicable, with respect to such extension.

Continuing airworthiness information

91.09.7 An owner or operator of an aeroplane of a maximum certificated take-off mass in excess of 5 700 kg shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide such information as required by the Director and shall report said information to him or her using a reporting system the Director has developed for that purpose.

PART 92: CONVEYANCE OF DANGEROUS GOODS

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Applicability

92.00.1 (1) This Part applies to –

- (a) any aircraft used for the conveyance of dangerous goods;
- (b) any person who -
 - (i) offers dangerous goods for conveyance by air;
 - (ii) conveys dangerous goods by air; or
 - (iii) accepts dangerous goods conveyed by air; and
- (c) any passenger or flight crew member on board or to be taken on board an aircraft.

(2) This Part does not apply to -

- (a) military aircraft;
- (b) military personnel who perform their official duties on board a military aircraft;
- (c) dangerous goods carried in an aircraft where such goods are intended
 - (i) to provide medical aid to a patient during a flight;
 - (ii) to provide veterinary aid or a humane killer for an animal during a flight;
 - (iii) for spraying, dusting or dropping in connection with agricultural, horticultural, forestry or pollution control operations; or
 - (iv) for purposes of game and livestock management during a flight;
- (d) articles and substances which would otherwise constitute dangerous goods but which are required to be on board the aircraft in accordance with the appropriate airworthiness requirements and the provisions of the operations manual concerned: Provided that articles and substances intended as replacements for such articles and substances, shall be conveyed in accordance with the requirements and standards as prescribed in Document SA-CATS 92;
- (e) articles and substances which would otherwise constitute dangerous goods but which are on board the aircraft for the specialised purposes as prescribed in Document SA-CATS 92; and
- (f) articles and substances intended for the personal use of passengers and flight crew members to the extent as prescribed in Document SA-CATS 92.

Prohibition of conveyance of dangerous goods

- **92.00.2** No person shall offer for conveyance in an aircraft, convey in an aircraft or accept for conveyance in an aircraft
 - (a) the dangerous goods specifically identified by name or by generic description in Document SA-CATS 92 as being forbidden for conveyance by air under any circumstances;
 - (b) the dangerous goods identified in Document SA-CATS 92 as being forbidden for conveyance by air under normal circumstances;
 - (c) any other dangerous goods, unless in accordance with the provisions of the Act, this part and the requirements and standards as prescribed in Document SA-CATS 92; and
 - (d) infected live animals.

Exemption

- **92.00.3** (1) The Director may, upon application in writing by any person referred to in regulation 92.00.1(1)(b), exempt such person from the provisions of regulation 92.00.2(b), in the case of
 - (a) extreme urgency;
 - (b) other forms of conveyance being inappropriate; or
 - (c) full compliance with the provisions of this part being contrary to aviation safety.
- (2) The provisions or Part 11 applies with the necessary changes to an application for exemption in terms of sub-regulation (1).

Classification, division and listing of dangerous goods

92.00.4 The classes, divisions and listing of dangerous goods are contained in Document SA-CATS 92.

Designated body or institution

- **92.00.5** (1) The body or institution designated under Part 12 shall, in addition to the powers and duties referred to in regulation 12.01.2
 - (a) promote the safety of the conveyance of dangerous goods by air and an awareness thereof; and
 - (b) advise the Director on any matter connected with the safe conveyance of dangerous goods by air.
- (2) The powers and duties referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 92

Designation of dangerous goods inspectors

- **92.00.6** (1) The Director may designate dangerous goods inspectors to exercise the powers referred to in regulation 92.00.7.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to in sub-regulation (1), are prescribed in Document SA-CATS 92.
- (3) The Director shall sign and issue to each designated dangerous goods inspector a document which shall state the full name of such inspector and contain a statement indicating that
 - (a) such inspector has been designated in terms of sub-regulation (1); and
 - (b) such inspector is authorised to exercise the powers referred to in regulation 92.00.7.

Powers of dangerous goods inspectors

- **92.00.7** (1) A designated dangerous goods inspector may
 - (a) enter and inspect any
 - (i) aerodrome or hangar;
 - (ii) premises where goods intended for conveyance by air are made, produced or manufactured or where goods or baggage intended for the conveyance by air are packed, held or received or where goods or baggage are received after being conveyed by air; and
 - (iii) aircraft, vehicle, freight container or unit load device used for the conveyance of dangerous goods, in order to ensure that the provisions of the Act, this part and the requirements and standards as prescribed in Document SA-CATS 92, are complied with; and
 - (b) request any person to produce or furnish him or her with all documents and information relating to dangerous goods or baggage in so far as this may be necessary for the proper execution of his or her functions.
- (2) A designated dangerous goods inspector who on reasonable grounds suspects that any baggage, consignment, freight container or unit load device contains goods which may not, in terms of the provisions of the Act, this part and the requirements and standards as prescribed in Document SA-CATS 92, be conveyed by air, or goods which constitute a danger or potential danger to persons, aircraft or any other property, may inspect such baggage, consignment, freight container or unit load device and, if he or she deems it necessary in the interest of aviation safety, order that such goods be detained and not be loaded in an aircraft.
- (3) A designated dangerous goods inspector may at any time
 - (a) search -
 - (i) any baggage, consignment, freight container or unit load device presented or accepted for conveyance by air;
 - (ii) any baggage, consignment, freight container or unit load device received after being conveyed by air; and

(iii) any person who has disembarked from an aircraft or who intends to board an aircraft, or the baggage or personal possessions of such person,

in order to ascertain whether dangerous goods have been or are to be conveyed by air, and a search referred to in subparagraph (iii) shall be conducted with strict regard to decency and order and a person shall be searched only by a person of the same gender;

- (b) satisfy himself or herself that the mass, quantity or composition of any
 - (i) goods or baggage offered or presented for conveyance in any consignment;
 - (ii) passengers' baggage;
 - (iii) freight container or unit load device;
 - (iv) stores conveyed by the owner of an aircraft, or his or her agent; and
 - (v) goods or baggage on board an aircraft, comply with the requirements and standards as prescribed in Document SA-CATS 92;
- (c) satisfy himself or herself that the requirements and standards as prescribed in Document SA-CATS 92 are complied with regarding the separation of the classes of dangerous goods in storage areas, unit load devices, vehicles and aircraft;
- (d) require goods to be removed from an aircraft if the requirements and standards referred to in paragraphs (b) and (c) are not complied with;
- request any person to produce or cause to be produced for inspection any document relating to a consignment intended for conveyance by air or which has been conveyed by air, or any other document specified in Document SA-CATS 92;
- (f) question any person handling dangerous goods in order to ascertain whether that person complies with the provisions of the Act, this part and the requirements and standards as prescribed in Document SA-CATS 92 relating to the handling of such dangerous goods; and
- (g) condemn any dangerous goods which, in his or her opinion, are not in a good condition, or the storage or use of which he or she deems to be dangerous and order any such dangerous goods to be destroyed forthwith, in which case the owner of goods so condemned, shall have no claim against such inspector or against the State for the loss thereof and shall, in connection with the destruction of explosives, be responsible for any expense incurred.

Training

92.00.8 (1) Any –

- (a) shipper of dangerous goods, including a packer and shipper's agent;
- (b) operator of any aircraft used -

- (i) in a commercial air transport operation in terms of Part 121, 127, or 135 of these Regulations; or;
- (ii) in a service as defined in paragraph (b) of the definition of 'air service' in section 1 of the Air Services Licensing Act, 1990 (Act No. 115 of 1990); or
- (c) person
 - (i) which performs the act of accepting, handling, loading, unloading, transferring or other processing of cargo, on behalf of an operator;
 - (ii) located at an aerodrome, which performs the act of processing passengers on behalf of an operator;
 - (iii) not located at an aerodrome, which performs the act of checking in passengers on behalf of an operator;
 - (iv) other than an operator, involved in processing cargo; or
 - (v) engaged in the security screening of passengers, their baggage and cargo,

shall ensure that the following categories of personnel in his, her or its employ successfully complete initial dangerous goods training and refresher dangerous goods training:

- (aa) Cargo personnel, i.e. any person who has access to a cargo warehouse;
- (bb) personnel engaged in the ground handling, storage and loading of dangerous goods;
- (cc) passenger handling personnel;
- (dd) security personnel who deal with the screening of passengers, their baggage and cargo;
- (ee) flight crew members;
- (ff) packers;
- (gg) shippers;
- (hh) shipper's agents;
- (ii) any person who has unescorted access to a cargo warehouse who is not responsible for the handling, storage, loading or transportation of cargo; and
- (jj) cabin crew members.
- (2) Training as required by this Part shall only be provided by a dangerous goods training organisation designated in terms of Part 141.

- (3) The subject matter of initial dangerous goods training and refresher dangerous goods training are prescribed in Document SA-CATS 92.
- (4) Any person, employee or agency, referred to in sub-regulation (1) shall complete refresher dangerous goods training every 24 months, calculated from the date of the successful completion of the initial dangerous goods training or the preceding refresher dangerous goods training, as the case may be.
- (5) Upon the successful completion of the initial dangerous goods training or the refresher dangerous goods training referred to in sub-regulation (3), the dangerous goods training organisation concerned shall issue to the candidate a certificate in the handling of dangerous goods to be conveyed by air.
- (6) Any instructor conducting a dangerous goods training programme shall successfully complete a category 6 initial training course and thereafter successfully complete a dangerous goods training refresher course within 24 months calculated from the date of the completion of the initial course with an approved ATO.
- (7) The curriculum for the training referred to in sub-regulation (6) is prescribed in Document SA-CATS 92.
- (8) An operator, aerodrome manager or ramp handling organization and or their respective service providers, sub-contractors shall maintain a record of training for their personnel, including third party personnel, and such records shall be made available on site and upon request.

Validation of foreign certificates

- **92.00.9** (1) The Director may upon application in writing by a person, validate any foreign certificate issued in the handling of dangerous goods to be conveyed by air, if the holder of the certificate submits documentary proof that
 - (a) such certificate has been obtained from an approved foreign training organisation; and
 - (b) he or she has successfully completed the refresher dangerous goods training referred to in regulation 92.00.8(3).
- (2) The application referred to in sub-regulation (1) shall be accompanied by the appropriate fee as prescribed in Part 187.
- (3) The provisions of regulation 92.00.8(4) and (5) shall apply with the necessary changes to the holder of a certificate referred to in sub-regulation (1).

Packing and packaging

- **92.00.10** (1) A shipper shall ensure that all dangerous goods which the shipper prepares or offers for conveyance by air, are packed in accordance with the provisions of this part and the requirements and standards as prescribed in Document SA-CATS 92.
- (2) A shipper shall ensure that any packaging used for the conveyance of dangerous goods by air shall
 - (a) comply with the material and construction specifications of, and be tested initially in accordance with the requirements and standards as prescribed in Document SA-CATS 92; and
 - (b) be of good quality and constructed and securely closed so as to prevent leakage caused by changes in temperature, humidity, pressure or vibration under normal conditions of conveyance by air.
- (3) A shipper shall ensure that inner packaging is packed, secured or cushioned to prevent its breakage or leakage and to control its movement within the outer packaging during normal conditions of conveyance by air.
- (4) A shipper shall ensure that packaging in direct contact with dangerous goods is resistant to any chemical or other action of such goods and cushioning, and that absorbent materials do not react dangerously with the contents of the receptacles.
- (5) A shipper shall ensure that packaging for which retention of a liquid is a basic function, is capable of withstanding, without leaking, the pressure as prescribed in Document SA-CATS 92.
- (6) No receptacle used for the conveyance of dangerous goods by air shall be re-used by the shipper until such receptacle has been inspected by such shipper and found free from corrosion or other damage.
- (7) If a receptacle, used for the conveyance of dangerous goods by air, is re-used by the shipper, all necessary measures shall be taken by the shipper to prevent contamination of subsequent dangerous goods conveyed therein.
- (8) If, because of the nature of their former contents, uncleaned empty receptacles may present a hazard, the shipper shall ensure that such receptacles are tightly closed and treated according to the hazard that they constitute.
- (9) A shipper shall ensure that no harmful quantity of any dangerous substance adhere to the outside of a package.

Responsibility of shipper

- **92.00.11** (1) A shipper shall ensure that dangerous goods offered for conveyance by air, are not dangerous goods identified as forbidden for conveyance by air in terms of regulation 92.00.2 and are
 - (a) identified, classified, packed, marked and labelled; and
 - (b) accompanied by a properly executed dangerous goods transport document,

- in accordance with the provisions of this part and the requirements and standards as prescribed in Document SA-CATS 92.
- (2) A shipper shall ensure that any person employed by him or her or any person employed to act on his or her behalf, who is involved in the preparation of a consignment of dangerous goods to be conveyed by air, is trained in accordance with the provisions of regulation 92.00.8.

Labelling and marking

- **92.00.12** (1) Any person who offers any package containing dangerous goods for conveyance by air, shall ensure that such package thus offered is labelled with the appropriate label or labels in accordance with the requirements and standards as prescribed in Document SA-CATS 92.
- (2) Any person who offers any package containing dangerous goods for conveyance by air, shall ensure that such package thus offered is marked with the proper shipping name, UN number, class of hazard, and subsidiary risk, and that any authorisation reference of the contents of the package in accordance with the requirements and standards as prescribed in Document SA-CATS 92.
- (3) (a) Any person who offers any package containing dangerous goods for conveyance by air, shall ensure that each packaging which is manufactured in accordance with a packaging specification as prescribed in Document SA-CATS 92, is marked with the appropriate packaging specification marking as prescribed in Document SA-CATS 92.
- (b) No packaging shall be marked with a packaging specification marking unless such packaging complies with the appropriate packaging specification as prescribed in Document SA-CATS 92.

Dangerous goods transport document

- **92.00.13** (1) Any person who offers dangerous goods for conveyance by air, shall, unless otherwise provided for in Document SA-CATS 92, complete, sign and provide the operator with a dangerous goods transport document and such other appropriate documents as prescribed in Document SA-CATS 92.
- (2) A dangerous goods transport document shall contain the information as prescribed in Document SA-CATS 92 as well as a declaration, signed by the person referred to in sub-regulation (1), indicating that the dangerous goods offered for conveyance by air are
 - (a) fully and accurately described by their proper shipping names;
 - (b) identified, classified, packed, marked and labelled in accordance with the requirements and standards as prescribed in Document SA-CATS 92;
 - (c) in proper condition for conveyance by air in accordance with the requirements and standards as prescribed in Document SA-CATS 92; and
 - (d) not dangerous goods identified as forbidden for conveyance by air in terms of regulation 92.00.2.

Acceptance procedures

- **92.00.14** (1) The operator of an aircraft in which dangerous goods are to be conveyed, shall not accept such dangerous goods for conveyance by air
 - (a) unless the dangerous goods are accompanied by a completed dangerous goods transport document, except where Document SA-CATS 92 provides that such document is not required; and
 - (b) until such operator has inspected the exterior or the package, overpack or freight container containing the dangerous goods in accordance with the acceptance procedures as prescribed in Document SA-CATS 92.
- (2) The operator referred to in sub-regulation (1) shall develop and use an acceptance checklist to ensure that the provisions of sub-regulation (1) regarding the acceptance of dangerous goods for conveyance by air, are complied with.
- (3) The acceptance checklist referred to in sub-regulation (2), shall comply with the requirements as prescribed in Document SA-CATS 92.

Information to be provided

- **92.00.15** (1) The operator of an aircraft in which dangerous goods are to be conveyed shall provide the PIC, as soon as practicable before departure of the aircraft, with the written information as prescribed in Document SA-CATS 92.
- (2) The operator referred to in sub-regulation (1), shall provide information to the flight crew members and employees concerned to enable such flight crew members and employees to carry out their duties with regard to the conveyance by air of dangerous goods, and such information shall include the information as prescribed in Document SA-CATS 92.

Inspection for damage or leakage by operator

- **92.00.16** (1) The operator of an aircraft in which dangerous goods are to be conveyed, shall inspect the exterior of each package and overpack containing dangerous goods and each freight container or package containing radioactive materials to ensure that there is no damage to or leakage from such package, overpack and freight container, before loading such package, overpack and container in the aircraft or into a unit load device.
- (2) The operator referred to in sub-regulation (1) shall inspect a unit load device before loading such device in the aircraft to ensure that there is no damage to or leakage from any dangerous goods contained therein.
- (3) No damaged or leaking package, overpack, freight container or unit load device shall be loaded in an aircraft.
- (4) If any package, overpack or freight container containing dangerous goods appears to be damaged or leaking after loading such package, overpack or freight container in an aircraft, the

operator shall remove or arrange for the removal of such package, overpack or freight container from the aircraft and shall ensure that the remainder of the consignment is in a proper condition for conveyance by air and that no other package, overpack or freight container has been contaminated.

- (5) Each package or overpack containing dangerous goods, or a freight container or package containing radioactive materials, shall be inspected by the operator for signs of damage or leakage upon unloading such package, overpack or freight container from the aircraft or unit load device, and if damage or leakage has occurred, the area where such package, overpack, freight container or unit load device were stowed in the aircraft, shall be inspected for damage or contamination.
- (6) If a package, overpack or freight container containing radioactive materials is found to be damaged or leaking, the operator shall
 - (a) take all necessary precautions to restrict access to such package, overpack or freight container containing radioactive materials; and
 - (b) designate a qualified person to assess the extent of the contamination and the radiation level.
- (7) If any hazardous contamination is found in an aircraft as a result of damage to or leakage from a package or overpack containing dangerous goods, the operator shall decontaminate the aircraft immediately.
- (8) The operator shall remove an aircraft from service immediately when such aircraft is contaminated by radioactive materials and shall not return such aircraft to service until the radiation level resulting from the fixed contamination at any accessible surface and the non-fixed contamination, is below the values as prescribed in Document SA-CATS 92.
- (9) Any person responsible for the conveyance and opening of packages containing infectious substances who becomes aware of damage to or leaking from such packages, shall
 - (a) avoid handling such infectious substances, where possible;
 - (b) inspect adjacent packages for contamination;
 - (c) inform the appropriate public health authority or veterinary authority of such damage or leakage;
 - (d) provide the appropriate authority of the country of transit with information regarding any possible contamination; and
 - (e) notify the shipper or the consignee accordingly.

Storage and loading

92.00.17 The operator of an aircraft in which dangerous goods are to be conveyed shall comply with the storage and loading provisions of this part and the requirements and standards as prescribed in Document SA-CATS 92.

Loading restrictions in cabin or on flight deck

92.00.18 Unless otherwise provided for in Document SA-CATS 92, dangerous goods shall not be stowed in an aircraft cabin occupied by passengers or on the flight deck of an aircraft.

Separation and segregation

- **92.00.19** (1) The operator of an aircraft in which dangerous goods are to be conveyed shall ensure that packages containing dangerous goods which might react dangerously when coming into contact with each other, are not stowed in an aircraft next to each other or in a position that would allow interaction between them in the event of leakage.
- (2) The operator shall ensure that a package containing poison or an infectious substance, is stowed in an aircraft in accordance with the requirements and standards prescribed in Document SA-CATS 92.
- (3) The operator shall ensure that a package containing radioactive materials, is stowed in an aircraft in a manner which separates the package from persons, live animals and undeveloped film, in accordance with the requirements and standards as prescribed in Document SA-CATS 92.

Securing of dangerous goods

- **92.00.20** (1) The operator of an aircraft in which dangerous goods are to be conveyed, shall, when dangerous goods are loaded in the aircraft, protect such dangerous goods from being damaged, and shall secure such dangerous goods in the aircraft in a manner which will prevent any movement in flight that could change the orientation of the packages.
- (2) When securing packages containing radioactive materials, the operator shall ensure that the securing is adequate in order that the requirements regarding the separation of radioactive materials referred to in regulation 92.00.19(3) are complied with.

Loading in cargo aircraft

92.00.21 Unless otherwise provided for in Document SA-CATS 92, a package or overpack containing dangerous goods and bearing a "cargo aircraft only" label, shall be loaded in a manner that any flight crew member or other person authorised by the operator, can see, handle and, where size and weight permit, separate such package or overpack from other cargo in flight.

Dangerous goods accident and incident reporting

- **92.00.22** (1) The operator of an aircraft, cargo warehouse personnel, aerodrome manager, ramp and ground handlers involved in a dangerous goods accident or dangerous goods incident within the Republic, shall within 48 hours after such accident or incident has occurred, notify
 - (a) in the case of an accident, the Director, any ATSU or the nearest police station; or
 - (b) in the case of an incident, any ATSU,

of such accident or incident, and such ATSU or police station, as the case may be, shall immediately on receipt of the notification, notify –

- (i) the Director; and
- (ii) where such accident or incident occurs at an aerodrome, the aerodrome manager.
- (2) The operator of a South African aircraft involved in a dangerous goods accident or dangerous goods incident outside the Republic, must, as soon as practicable, notify
 - (a) the appropriate authority of the State in territory where the accident or incident has occurred, directly or through any ATSU; and
 - (b) the Director,

of such accident or incident.

- (3) Any notification of a dangerous goods accident or dangerous goods incident shall, in addition to the provisions of regulation 12.02.4(a), contain the particulars as prescribed in Document SA-CATS 92.
- (4) In the event of an aircraft accident or a serious incident where dangerous goods carried as cargo may be involved, the operator of the aircraft carrying the dangerous goods as cargo must provide information, without delay, to emergency services responding to the accident or serious incident about the dangerous goods on board, as shown on the written information to the PIC.
- (5) In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as cargo must, if requested to do so, provide information without delay to emergency services responding to the incident, as shown on the written information to the PIC.

Dangerous goods accident and incident investigation

92.00.23 The investigator-in-charge shall investigate all dangerous goods accidents and dangerous goods incidents reported in terms of regulation 92.00.22(1), and Part 12 shall apply with the necessary changes to such investigation.

Dangerous goods accident and incident information

92.00.24 In the case of a consignment for which a dangerous goods transport document is required in terms of this part, the operator or cargo handling organisation shall ensure that the information as prescribed in Document SA-CATS 92 is available at all times for use in an emergency response to dangerous goods accidents or dangerous goods incidents.

Notification of undeclared or misdeclared dangerous goods

- **92.00.25** The operator of an aircraft in which dangerous goods are conveyed within the Republic or outside the Republic shall, within 48 hours after the discovery of
 - (a) any undeclared or misdeclared dangerous goods; or

(b) dangerous goods not permitted in terms of regulation 92.00.27, on board the aircraft or in the baggage of a passenger or flight crew member, notify the Director or the appropriate authority thereof, as the case may be.

Retention of documents

92.00.26 (1) The operator of an aircraft in which dangerous goods are conveyed, shall ensure that at least one copy of all records pertaining to a flight on which dangerous goods are conveyed, including the –

- (a) dangerous goods transport records;
- (b) acceptance checklist, if completion of the checklist is required; and
- (c) written information provided to the PIC in terms of regulation 92.00.15(1),

are retained for a period of 90 days, calculated from the date of such flight.

(2) The operator of an aircraft involved in a dangerous goods accident or incident, and aerodrome managers, where such accident or incident occurred, shall keep the records of dangerous goods incident or accidents and undeclared or misdeclared dangerous goods and such records shall be made available on site and upon request by an authorized officer or inspector and shall be reported to the Director within 48 hours.

Dangerous goods carried by passengers or flight crew members

92.00.27 No passenger or flight crew member shall carry dangerous goods as, or in, carry-on baggage or checked baggage, or on his or her person, except in accordance with the requirements and standards as prescribed in Document SA-CATS 92.

Information to passengers

92.00.28 Every operator shall ensure that information regarding the types of goods that passengers are prohibited to carry on board an aircraft, is available to such passengers as prescribed in Document SA-CATS 92 and such information shall include –

- (a) applicable information accompanying the passenger ticket; and
- (b) notices which are prominently displayed
 - (i) at any location where tickets are issued and baggage checked; and
 - (ii) in aircraft boarding areas and baggage claim areas.

Powers of an aerodrome operator in regard to the loading and unloading of dangerous goods

92.00.29 (1) If in the opinion of the aerodrome operator a possibility exists that persons on a licensed aerodrome may be endangered through the loading or unloading of dangerous goods,

he or she may take any of the steps as contemplated in sub-regulations (2), (3) and (4) of this regulation.

- (2) If the operator of an aircraft has informed the aerodrome operator of the proposed loading or unloading and the aerodrome operator considers that persons of property on the licensed aerodrome will be endangered by the proposed loading or unloading, the aerodrome operator may
 - (a) permit such loading or unloading subject to such conditions as the aerodrome operator may deem necessary to impose with a view to safeguarding persons or property on the aerodrome, or
 - (b) prohibit such loading or unloading.
- (3) If dangerous goods have been loaded in or unloaded from an aircraft without the permission of the aerodrome operator, the aerodrome operator may direct that such dangerous cargo be unloaded from or reloaded in such aircraft, or give such other directions or impose such conditions as the aerodrome operator may deem necessary with a view to safeguarding persons or property on the aerodrome.
- (4) The operator of an aircraft carrying dangerous goods on an aerodrome shall, if directed to do so by the aerodrome operator, move such aircraft to another place on the aerodrome and keep such aircraft in that place until the aerodrome operator grants permission for such aircraft to be moved.

Designation of persons responsible for dangerous goods

- **92.00.30** (1) Each operator, ramp handling organisation, ground handling organisation and aerodrome manager shall designate a dangerous goods person who shall be responsible for the following matters involving dangerous goods:
 - (a) Compliance with the regulations;
 - (b) Quality control;
 - (c) Reporting of accidents and incidents;
 - (d) Maintenance of dangerous goods incidents and accidents records;
- (2) The minimum requirement or qualification for the designated dangerous goods personnel is the successful completion of a minimum dangerous goods Category 6 training from an approved ATO.

Issuing of competency cards

92.00.31 All personnel required to have a dangerous goods qualification as prescribed in Document SA-CATS 92 shall be issued with a competency card and shall carry the card on their person at all times while on duty.

PART 94: OPERATION OF NON-TYPE CERTIFICATED AIRCRAFT

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94.06.13	Operation of ex-military aircraft
94.06.14	Display authorisation

SUBPART 7: MAINTENANCE

94.07.1 General

94.07.2 Maintenance Control Manual

SUBPART 1: GENERAL PROVISIONS

Applicability

94.01.1 (1) This Part applies to –

- (a) non-type certificated aircraft operated within the Republic;
- (b) non-type certificated aircraft registered in the Republic;
- (c) persons acting as flight crew members of non-type certificated aircraft registered in the Republic; and
- (d) persons who are on board a non-type certificated aircraft operated in terms of this Part.
- (2) The provisions of the various other Parts of these regulations shall apply with the necessary changes to any non-type certificated aircraft unless specifically exempted by the provisions of this Part.
- (3) Non-type certificated aircraft operated in terms of this Part are prohibited from providing a commercial air transport operation, as defined in Part 1 of the regulations.
- (4) Although flying training is not considered to be a commercial air transport operation, any non-type certificate aircraft used in flight training shall be operated in terms of Part 96.
- (5) Notwithstanding the provision of sub-regulations (3) and (4), non-type certificated aircraft operated in terms of this Part may be used for the training of its registered owner: Provided the training is provided by an ATO approved in terms of Part 141 and the airworthiness requirements in respect of a non-type certificated aircraft used in training are met.
- (6) The proviso in sub-regulation (5), does not apply in respect of the conversion training contemplated in sub-regulations (14) and (15) of regulation 24.02.3.

Authority to fly

- **94.01.2** (1) No person shall operate a non-type certificated aircraft unless
 - (a) in the case of aircraft classified in the paragraphs (a) to (g) of sub-regulation 24.01.1(2) for such aircraft an authority to fly or proving flight authority has been issued in terms of these regulations;
 - (b) the aircraft is in an airworthy condition; and
 - (c) the PIC is the holder of a valid pilot licence with the appropriate rating for the particular category and type of non-type certificated aircraft.
- (2) In the case of a foreign-registered non-type certificated aircraft, prior written permission by the Director is required before such aircraft may enter the Republic.

- (3) The permission referred to in sub-regulation (2) shall normally be granted only
 - (a) for a limited period of time;
 - (b) for the purpose of participation in international events within the Republic, for recordbreaking purposes or demonstration flights, or at the discretion of the Director if an acceptable level of safety can be shown and public safety is not jeopardized;
 - (c) proof is submitted that for the aircraft an authority to fly or similar certificate was issued by the foreign civil aviation authority or an organisation designated for the purpose by such authority; and
 - (d) if the aircraft is made available for inspection by a licensed AME or AMO or an Approved Person with the relevant rating or approval, or by any other person designated for the purpose by the Director, as soon as possible after its arrival in the Republic, and an inspection report has been submitted to the Director.

SUBPART 2: FLIGHT CREW

Ex-military aircraft

94.02.1 (1) Pilot Licensing – General Requirements

- (a) No person shall act as pilot of a South African registered ex-military aircraft unless such person is the holder of a PPL or higher category pilot licence with the appropriate category and type rating, issued or validated in terms of Part 61.
- (b) A type-rating shall be issued by the Director once the licence holder has completed the required training as detailed in Document SA-CATS 61 or Document SA-CATS 94, as applicable, and has submitted the required type rating forms, logbook copies, technical examination and payment as specified in these regulations to the Director. The currency of the type rating shall be in accordance with the provisions of Part 61 of these regulations.
- (c) Before performing acrobatic flight in an aircraft that has been certificated for, or is capable of performing acrobatic flight, the PIC shall also be the holder of an acrobatic rating issued by the Director or by an organisation designated for the purpose in terms of Part 149, as the case may be.
- (d) The Director may exempt a candidate from undergoing all or part of the prescribed training if he or she is satisfied that the candidate
 - (i) has sufficient flying experience on similar types of aircraft; or
 - (ii) is the holder of a foreign type rating for the aircraft type and the Director is satisfied that the training was of an acceptable standard.

(2) Pilot Training on Ex-Military Jet Aircraft

- (a) Pilots wishing to be rated to fly ex-military jet aircraft shall have the appropriate flying experience. Conversion, refresher and technical training requirements for these aircraft will be assessed on an individual basis by the Director, after receiving the relevant documentation.
- (b) Flying training is not allowed prior to the approval of the applicable syllabus.

- (c) Pilots who have little or no military jet or high-performance piston-engine or turbo-prop aircraft experience shall be required to undergo rigorous and detailed conversion training according to the syllabus prescribed in Document SA-CATS 94.
- (d) Guidelines for the establishment of training and acrobatic training criteria for individual applicants are provided in Document SA-CATS 94.
- (e) The applicant shall supply the information as detailed in Document SA-CATS 94 when applying for approval of the training criteria referred to in paragraph (a).
- (f) The Director may allow a Grade II or Grade I flight instructor with the appropriate category and type rating to determine how many hours of acrobatic training may be counted towards the conversion training prescribed by paragraph (c).
- (g) In the case of an ex-military aircraft that is available in a single-seat version only, the Director may accept the training requirements for single-seat aircraft of the air force of the country of origin, or – where not available – training may be simulated in a similar aircraft. The Director will treat each application for a type rating on a single-seat type on its merits.
- (h) For training purposes, the Director may permit the candidate to enter into an arrangement with an owner of a similar aircraft type that has a valid Authority to Fly, e.g. a dual-seat training variant or dual-seat aircraft of similar performance: Provided that:
 - (i) the candidate has obtained permission from the Director to place the aircraft type for which the training is required on the South African Civil Aircraft Register;
 - (ii) the candidate and the owner of the training variant submit to the Director for approval the commercial agreement for the use of the aircraft;
 - (iii) the owner submits to the Director the insurance documentation stating that the candidate may undergo training on the aircraft; and
 - (v) the Director issues a revised authority to fly for the aircraft stipulating that it may be used for the training of the candidate.

SUBPART 3: DOCUMENTATION AND RECORDS

Operations manual

94.03.1 (1) The owner or operator of –

- (a) a veteran aeroplane with a maximum all-up mass in excess of 5 700 kg or with more than 9 passenger seats;
- (b) a veteran helicopter with a maximum all-up mass in excess of 3 175 kg;
- (c) an ex-military jet aircraft; or
- (d) any non-type certificated aircraft, classified in any of the paragraphs (a) to (g) in regulation 24.01.1(2) and operated by an ATO approved in terms of Part 141 for the purpose of providing flying training,

shall draw up an operations manual containing all information required under this Part, and if applicable, required under Part 96 of the Regulations, whether the aircraft is to be operated in commercial air transport operations or not. The operations manual shall set out the manner in which the owner will operate and maintain the aircraft.

- (2) The owner shall submit the operations manual in duplicate for approval to the Director.
- (3) If the Director is satisfied that the owner will comply with the provisions of the relevant Parts of the Regulations, he or she shall certify in writing on both copies of the operations manual that

such manual has been approved and shall return one copy of the approved operations manual to the owner.

- (4) The owner shall submit any amendment to an approved operations manual in duplicate for approval to the Director.
- (5) If the Director is satisfied that the owner will comply with the provisions of the relevant Parts of the Regulations, he or she shall certify in writing on both copies of the amendment to the approved operations manual that such amendment has been approved and shall return one copy of the approved amendment to the owner.
- (6) The owner shall at all times operate the aircraft, referred to in sub-regulation (1), in accordance with the approved operations manual or an approved amendment thereto.
- (7) The owner shall
 - (a) ensure that all operations personnel are able to understand the technical language used in those sections of the operations manual which pertain to their duties;
 - (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight, are easily accessible to the flight crew members on board;
 - (c) make the operations manual available for the use and guidance of operations personnel;
 - (d) provide the flight crew members with their own personal copy of the sections of the operations manual which are relevant to the duties assigned to them;
 - (e) keep the operations manual up to date; and
 - (f) keep the operations manual in a safe place.
- (8) The contents of the operations manual shall not contravene the conditions contained in the authority to fly issued to the owner in terms of Subpart 2 of Part 24 of these Regulations.
- (9) The structure and contents of the operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 96.

Logbooks

- **94.03.2** (1) For any veteran or ex-military aircraft, and for any non-type certificated aircraft used in a commercial air transport operation or for the provision of flight training, appropriate airframe, engine and propeller logbooks, as applicable, shall be maintained in accordance with the provisions of Part 44 of these Regulations.
- (2) Notwithstanding the provisions of sub-regulation (1), the owner or operator of an exmilitary aircraft may continue to use the equivalent document or documents used by the previous military operator for the recording of flight times and maintenance carried out.
- (3) Notwithstanding the provisions of regulation 44.01.2, the following non-type certificated aircraft are exempted from keeping the logbooks, prescribed by Part 44 to the extent stated:
 - (a) balloons: record of maintenance to be kept in accordance with the approved maintenance schedule;
 - (b) parachutes: record of maintenance assembly packing to be kept in a logbook or a separate log page approved by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be;
 - (c) model aircraft.

SUBPART 4: COMMUNICATION AND NAVIGATION EQUIPMENT

Communication equipment

- **94.04.1** (1) Notwithstanding the provisions of regulation 91.05.1 of these Regulations, the prescribed communication equipment is not required for aircraft operated in Class G airspace under VFR.
- (2) Unmanned free balloons and unmanned aerial vehicles shall carry the equipment as prescribed in the authority to fly or in terms of regulation 94.06.6.
- (3) Notwithstanding the provisions of sub-regulation (1), at sites where and when paragliding, hang-gliding, or parachute descents takes place, the persons involved shall preferably arrange for the automatic transmission on the applicable flight information frequency of a warning that such activity takes place, or alternatively make use of a hand-held transceiver to warn other aircraft in the vicinity.
- (4) Notwithstanding the provisions of sub-regulation (1) and (3), at sites where aero-towing of hang-gliders takes place, the use of the appropriate communication equipment, either airborne or ground-based, to warn other air traffic in the vicinity that aero-towing is in progress is mandatory.
- (5) The Director may authorise in writing the Central Airspace Management Unit (CAMU) to allocate a temporary segregated airspace (TSA) to separate aircraft operating without radio from other air traffic.

SUBPART 5: RULES OF THE AIR

Conditions for Flight

- **94.05.1** (1) Unless granted permission by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on a case-by-case basis, a non-type certificated aircraft may not be flown
 - (a) by night;
 - (b) in meteorological conditions less than those prescribed as suitable for flight under VFR;
 - (c) within controlled airspace, unless cleared by and on conditions prescribed by ATC; or
 - (d) within 5 NM from the aerodrome reference point of an aerodrome, licensed or approved in terms of Part 139 of these regulations and situated in Class G airspace, unless established unmanned aerodrome procedures for the particular aerodrome can be adhered to; or
 - (e) unless unavoidable, over built up areas and open-air assemblies of persons except for the purpose of take-off, transit and landing.
- (2) Notwithstanding the provisions of sub-regulation (1) a non-type certificated aircraft may operate under IFR conditions by day if it has been granted permission in terms of Regulation 24.02.3(3) of these Regulations.

(3) Notwithstanding the provisions of sub-regulation (1)(e), paragliders and hangliders, and powered versions thereof, may fly over built up areas provided they are foot-launched.

Aircraft speed

- **94.05.2** Notwithstanding the provisions of regulation 91.06.9 the Director may authorise in writing the CAMU to allocate a TSA in which aircraft may be flown at
 - (a) Mach 0.90 if below 5 000 feet AGL;
 - (b) Mach 0.95 if between 5 000 feet AGL and FL 300; and
 - (c) supersonic speeds if at or above FL 300.

SUBPART 6: FLIGHT OPERATIONS

Standards and procedures

- **94.06.1** (1) Any person operating a non-type certificated aircraft for aviation recreational purposes or in air displays, shall comply with the standards and procedures determined by the organisation designated for the purpose in terms of Part 149, if any, and if applicable.
- (2) Any person operating a non-type certificated aircraft for aviation recreational purposes shall be a *bona fide* member of an applicable aviation recreation organisation designated by the Director in terms of Part 149 and abide by its constitution and code of conduct, if any.
- (3) For the purposes of this Subpart, and until such time that an organisation has been approved in terms of Part 149, any person operating a non-type certificated aircraft for aviation recreational purposes or in air displays, shall comply with the flight operation standards and procedures prescribed for its members by the national body representative of the particular aviation sport, provided that these standards and procedures include those prescribed in, and are not in conflict with, the provisions of this Part.

Operation of paragliders, including powered paragliders and paratrikes

- **94.06.2** (1) Notwithstanding the provisions of –
- (a) regulation 91.03.2 and regulation 91.03.5, a person may operate a paraglider without carrying on board a current, approved flight manual or flight folio;
- (b) regulation 91.03.7, a person may operate a paraglider without a certificate of release to service;
- (c) Subpart 4 of Part 91, a person may operate a paraglider if the paraglider has been equipped with
 - (i) a safety harness or safety belt for each person on board the paraglider;
 - (ii) in the case of flights above 500 feet AGL, an altimeter that is accurate to within approximately 100 feet; and
 - (iii) in the case of flight over water beyond gliding distance from shore, one lifejacket or individual flotation device for each person on board, worn by such persons.
- (d) regulation 91.06.7(5), the PIC of a paraglider, overtaking another paraglider or hangglider soaring on a ridge, shall pass on the ridge side of the overtaken paraglider or hangglider;

- (e) regulation 91.06.21, a person may operate a paraglider to 500 feet vertically below cloud
 - (i) up to a maximum altitude of 19 500 feet above MSL in class G airspace; and
 - (ii) up to a maximum altitude of 19 500 feet above MSL in Class E airspace, other than transponder-mandatory airspace;
- (f) regulation 91.07.2, the PIC of a paraglider may fly the paraglider below 500 feet AGL for the purpose of ridge soaring if such paraglider is flown in a manner that does not endanger persons or property on the ground;
- (g) regulation 139.01.1(2)(b), the pilot in-command of a paraglider may use any suitable area to launch the paraglider: Provided permission has been obtained from the owner of the site or the local authority having jurisdiction; and provided further that in the case of flight training or tandem operations, only launch sites approved by the Director or by the organisation designated for the purpose in terms of Part 149, as the case may be, shall be used.
- (2) Each person on board a paraglider shall wear a serviceable, rigid, protective helmet of a type approved by the Director or by the organisation designated for the purpose in terms of Part 149.
- (3) In addition to the restrictions imposed by regulation 94.05.1, no paraglider operation shall be conducted over a built-up area higher than 19 500 feet above MSL.
- (4) (a) On every winch, used for the launching of paragliders, a means shall be provided for the severing of the launching cable.
 - (b) The means referred to in paragraph (a) shall be subject to the approval of the Director or the organisation, approved for the purpose in terms of Part 149, as the case may be, and shall be so positioned that it can be easily and readily operated by the winch operator.
- (5) (a) No person may operate a paraglider with a passenger, unless that person holds a valid tandem rating.
 - (b) Tandem operations shall be limited to two persons, including the pilot.
 - (c) For tandem operations the carriage of a back-up parachute is compulsory.

Operation of gyroplanes

94.06.3 (1) Notwithstanding the provisions of –

- (a) regulations 91.03.3 and 91.03.5, a person may operate a non-type certificated gyroplane or gyroglider without carrying on board a current, approved flight manual or flight folio;
- (b) Subpart 4 of Part 91, a person may operate a non-type certificated gyroplane or gyroglider if the gyroplane or gyroglider has been equipped with –
 - a seat with an approved safety harness or safety belt for each person on board the gyroplane or gyroglider;
 - (ii) a map which covers the complete route of the proposed flight;
 - (iii) in the case of flights above 500 feet AGL, an altimeter that is accurate to within approximately 100 feet;
 - (iv) a rotor brake; and
 - (v) in the case of flight over water beyond autorotative distance from shore, one lifejacket or individual flotation device for each person on board, stored in a position easily accessible for such persons, or alternatively worn by such persons.

(2) In addition to the restrictions imposed by regulation 94.05.1, no gyroplane or gyroglider operation shall be conducted above 500 feet AGL unless fitted with an approved, serviceable compass.

Operation of manned free balloons

- **94.06.4** (1) Notwithstanding the provisions of Subpart 4 of Part 91, a person may operate a non-type certificated manned free balloon if the balloon has been equipped with
 - (a) a map which covers the complete route of the proposed flight;
 - (b) an approved sensitive altimeter;
 - (c) a rate-of-climb indicator;
 - (d) a fire extinguisher;
 - (e) gloves;
 - (f) a handling line;
 - (g) in the case of a hot-air balloon:
 - (i) two alternate methods of ignition;
 - (ii) a fuel quantity gauge;
 - (iii) envelope temperature indicator; and
 - (h) in the case of flight over water, one lifejacket or individual flotation device for each person on board, stored in a position easily accessible for such persons, or alternatively worn by such persons.

Operation of captive balloons

- **94.06.5** (1) Captive balloons are exempted from these regulations –
- (a) except from regulation 94.05.1; and
- (b) provided that no captive balloon operation shall be conducted
 - (i) higher than 150 feet above the surface; or
 - (ii) from or above a public road;
 - unless with the prior approval of the Director and on conditions determined by him or her.
- (2) In the event of a captive balloon breaking free from its moorings, the operator thereof shall immediately report the occurrence to the nearest ATSU, indicating the direction in which the balloon is drifting.

Operation of unmanned free balloons

- **94.06.6** (1) Unmanned free balloons are exempted from these regulations, except that no unmanned free balloon operations shall take place without the prior permission of the Director and on the conditions determined by him or her.
- (2) For purposes of this regulation, the mass release of toy balloons shall be considered to be the launch of an unmanned free balloon.

Operation of amateur-built or production-built aircraft, including microlight aeroplanes

- **94.06.7** (1) Notwithstanding the provisions of –
- (a) regulation 91.03.2 and regulation 91.03.5, a person may operate an amateur-built or production-built aircraft, including a microlight aeroplane, without carrying on board a current, approved flight manual or flight folio should such carriage not be safely possible;

- (b) Subpart 4 of Part 91, a person may operate an amateur-built or production-built aircraft, including a microlight aeroplane, if the aircraft has been equipped with
 - (i) a seat with an approved safety harness or safety belt for each person on board the aircraft;
 - (ii) a map which covers the complete route of the proposed flight; and
 - (iii) in the case of flight over water beyond gliding distance from shore, one lifejacket or individual floatation device for each person on board, stored in a position easily accessible for such persons, or alternatively worn by such persons.

Operation of gliders

94.06.8 (1) Notwithstanding the provisions of –

- (a) regulation 91.03.2 and regulation 91.03.5, a person may operate a non-type certificated glider without carrying on board a current, approved flight manual or flight folio should such carriage not be safely possible;
- (b) Subpart 4 of Part 91, a person may operate a non-type certificated glider if the glider has been equipped with
 - (i) a seat with an approved safety harness or safety belt for each person on board the glider;
 - (ii) a map which covers the complete route of the proposed flight;
 - (iii) in the case of flights above 500 feet, an altimeter that is accurate to within approximately 100 feet;
 - (iv) vertical speed indicator or similar instrument; and
 - in the case of flight over water beyond gliding distance from shore, one lifejacket or individual flotation device for each person on board, stored in a position easily accessible for such persons, or alternatively worn by such persons;
- (c) Part 139, in the event of an unavoidable out-landing a person may land a glider, at a suitable site other than an airfield.
- (2) (a) On every winch, used for the launching of gliders, a means shall be provided for the severing of the launching cable.
- (b) The means referred to in paragraph (a) shall be subject to the approval of the Director or the organisation, approved for the purpose in terms of Part 149, as the case may be, and shall be so positioned that it can be easily and readily operated by the winch operator.

Operation of hang-gliders

94.06.9 (1) Notwithstanding the provisions of –

- (a) regulation 91.03.2 and regulation 91.03.5, a person may operate a hang-glider without carrying on board a current, approved flight manual or flight folio;
- (b) regulation 91.03.7, a person may operate a hang-glider without a certificate of release to service:
- (c) Subpart 4 of Part 91, a person may operate a hang-glider if the hang-glider has been equipped with
 - (i) an approved safety harness or safety belt for each person on board the hangglider;
 - (ii) in the case of flights above 500 feet AGL, an altimeter that is accurate to within approximately 100 feet; and
 - (iii) in the case of flight over water one lifejacket for each person on board and worn by such persons;

- (d) regulation 91.06.7(5), the person operating a hang-glider overtaking another hang-glider or paraglider soaring on a ridge shall pass on the ridge side of the overtaken hang-glider or paraglider;
- (e) regulation 91.06.21, a person may operate a hang-glider to 500 feet vertically below cloud
 - (i) up to a maximum altitude of 19 500 feet above MSL in class G airspace; and
 - (ii) up to a maximum altitude of 19 500 feet above MSL in Class E airspace, other than transponder-mandatory airspace;
- (f) regulation 91.06.32, a person may operate a hang-glider below 500 feet AGL for the purpose of ridge soaring: Provided such hang-glider is flown in a manner that does not endanger persons or property on the surface;
- (g) regulation 139.01.1(2)(b), the pilot in-command of a hang-glider may use any suitable area to launch the hang-glider: Provided permission has been obtained from the owner of the site or the local authority having jurisdiction; and Provided furthermore that in the case of flight training or tandem operations, only launch sites approved by the Director or by the organisation designated for the purpose in terms of Part 149, as the case may be, shall be used.
- (2) Each pilot and passenger of a hang-glider shall wear a serviceable, rigid, protective helmet of a type approved by the Director or by the organisation designated for the purpose in terms of Part 149.
- (3) In addition to the restrictions imposed by regulation 94.05.1, no hang-glider operation shall be conducted
 - (a) over a built-up area; or
 - (b) higher than 19 500 feet above MSL.
- (4) (a) On every winch, used for the launching of hang-gliders, a means shall be provided for the severing of the launching cable.
 - (b) The means referred to in paragraph (a) shall be subject to the approval of the Director or the organisation, approved for the purpose in terms of Part 149, as the case may be, and shall be so positioned that it can be easily and readily operated by the winch operator.
- (5) (a) No person may operate a hang-glider with a passenger, unless that person holds a valid tandem rating.
 - (b) Tandem operations shall be limited to two persons, including the pilot.
 - (c) The PIC shall carry a tandem-rated reserve parachute during tandem operations.
- (6) (a) No person may operate a hang-glider in an aero-tow operation unless such person is the holder of an appropriately endorsed licensed.
 - (b) The requirements for the issue of an aero-tow endorsement are those prescribed in Part 62.

Operation of line-controlled kites

- **94.06.10** Line-controlled kites are exempted from these regulations –
- (a) except from regulation 94.05.1; and
- (b) provided that no line-controlled kite shall be flown
 - (i) higher than 150 feet above the surface;
 - (ii) from or above a public road; or
 - (iii) on the approaches to any aerodrome licensed or approved in terms of Part 139 of these regulations,

unless with the prior approval of the Director and on conditions determined by him or her.

Operation of model aircraft

- **94.06.11** Model aircraft are exempted from these regulations –
- (a) except from regulation 94.05.1; and
- (b) provided that no model aircraft shall be flown -
 - (i) higher than 150 feet above the surface; or
 - (ii) from or above a public road,

unless with the prior approval of the Director and on conditions determined by him or her; or in airspace specifically approved for the purpose by the Director and on conditions set by him or her for the use of such airspace.

Operation of parachutes

94.06.12 The regulations governing parachuting operations are those prescribed in Part 105 of these regulations.

Operation of ex-military jet aircraft

- **94.06.13** (1) Further to the provisions of regulation 91.07.12, an ex-military jet aircraft shall carry sufficient fuel
 - (a) to divert from its destination aerodrome to an alternate aerodrome that is at least 100 km distant from the destination aerodrome; and
 - (b) to allow for at least 10 minutes of flight at cruise-power settings when arriving over the alternate aerodrome referred to in sub-regulation (a).
- (2) (a) Only if the Director on the authority to fly has approved the carriage of passengers may passengers be carried in an ex-military jet aircraft.
 - (b) Where applicable, the owner of an ex-military jet aircraft shall ensure that the medical and physical condition of the passenger complies with the conditions prescribed by the manufacturer of the ejection seat of the aircraft.
 - (c) It is the responsibility of the owner of an ex-military jet aircraft to provide the passenger with suitable and serviceable flying equipment, protection gear and clothing.
- (3) The owner of an ex-military jet aircraft shall ensure that the passenger is thoroughly briefed on
 - (a) all the dangers associated with the flying in an ex-military jet aircraft, including the possible injuries following ejection; and
 - (b) actions during flight:
 - (i) the operation of switches and handles, if applicable;
 - (ii) the actions and execution of commands during emergency situations;
 - (iii) the actions should the PIC become incapacitated during flight; and
 - (iv) any other information as seen fit by the owner or the PIC.
 - (4) *MEL*
 - (a) Oxygen Systems
 - Oxygen system shall be fully serviceable, unless specifically exempted, whether or not it is intended to fly the aircraft above FL 100.
 - (b) Aircraft Pressurisation

Aircraft pressurisation systems shall be fully serviceable, unless specifically exempted, irrespective of the altitudes it is intended that the aircraft be flown.

(c) Ejection Seats

Where ejection seats are an integral part of the aircrew escape system, as specified in the relevant Flight Manual or Aircrew Notes, they shall be fully serviceable for all flights unless specifically exempted, and all occupants shall have been suitably instructed in their use.

(d) Flying Clothing and Equipment

- (i) Certain items of flying clothing and personal equipment are an integral part of the aircraft safety equipment, such as life-saving jackets with dinghy connections or personal equipment connectors with oxygen connections. Where the appropriate clothing, equipment or systems are required for flight, these additional items shall be made available and be fully serviceable.
- (ii) Unless specifically exempted, all occupants of an ex-military jet or turbo-prop aircraft shall wear protective helmets, equipped with suitable visors and facilitating communication.
- (iii) Aircraft that are to be operated over large water masses beyond gliding distance from shore shall be equipped with suitable survival equipment, and the occupants shall wear suitable survival clothing and equipment.

(e) Emergency and Backup Systems

Systems under this heading are invariably an integral part of the aircraft build standard and will have been installed with certain emergencies in mind (i.e. emergency undercarriage lowering, or hood opening or jettison). All such systems shall be serviceable for flight, unless specifically exempted.

(f) Instrumentation for Flight under IFR and Standby Instrumentation
Where permission has been granted to operate the aircraft in IMC, all instrumentation and equipment normally required for operation in IMC according to IFR shall have been fitted and be serviceable in accordance with the provisions of Part 91 of the Regulations.

(g) Weaponry

- (i) Where weaponry are an integral part of the aircraft, such weaponry shall be permanently de-activated, or be removed and replaced by ballast to ensure that the correct mass and centre of gravity of the aircraft is maintained.
- (ii) The carriage of external weaponry is prohibited.

(h) External Equipment

Where aircraft are capable of carrying external fuel tanks, whether jettisonable or not, such fuel tanks may be used: Provided that all systems applicable to the fuel tanks are serviceable. The pilot must also be fully qualified in the handling of the aircraft with and without the external fuel tanks (including asymmetric flight) and conversant with the jettison restrictions, limits and implications.

Display authorization

- **94.06.14** (1) When a non-type certificated aircraft, classified in the paragraphs (a) to (g) of regulation 24.01.1(2), is to participate in a public flying demonstration, the PIC shall be the holder of an appropriate Display Authorization.
- (2) The Display Authorization may be issued by the Director or by an organisation designated for the purpose in terms of Part 149, as the case may be, in writing if he, she or it is satisfied that –

- (a) the pilot has the required experience; and
- (b) the proposed display sequence can be executed safely with the particular aircraft.
- (3) The Display Authority shall be issued on the prescribed form, and shall detail the aircraft to be used, its configuration, the sequence to be flown, and any other condition that may be imposed by the Director or by the organisation designated for the purpose in terms of Part 149, as the case may be, at his, her or its discretion in the interest of flight and public safety.
- (4) The following information shall be submitted to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, when applying for a Display Authorization:
 - (a) a summary of the pilot's total flying experience and details of experience on the type of aircraft to be flown in the display;
 - (b) a detailed list of previous air display experience, to include events, dates, duration, aircraft types, and sequences flown;
 - (c) the details of the sequence for which Display Authorization is sought, including:
 - (i) good weather sequence; and
 - (ii) bad weather sequence, where the weather conditions, such as cloud ceiling, impose a restriction on the good weather display sequence.

The sequences shall be submitted in textual and graphical form, with the minimum meteorological conditions for each sequence specified.

- (d) The specific procedures to be followed for possible emergencies that may arise during the display, including the listing of diversion aerodromes.
- (e) Details of the aircraft in the configuration to be used in the display, including take-off mass, take-off fuel and landing fuel.
 - (5) The application shall be made in the form prescribed in SA-CATS 94.
 - (6) The application shall be accompanied by the appropriate fee prescribed in Part 187.

SUBPART 7: MAINTENANCE

General

- **94.07.1** (1) No owner, operator or PIC of a non-type certificated aircraft, classified in paragraphs (a) to (g) of sub-regulation 24.01.1(2), shall operate the aircraft unless such aircraft is maintained and released to service in accordance with the provisions of Part 24.
- (2) No owner, operator or PIC of a non-type certificated aircraft, classified in paragraphs (h) to (l) in regulation 24.01.1(2) shall operate the aircraft unless such aircraft has been properly maintained and is in an airworthy condition.

Maintenance control manual

94.07.2 Where an owner or operator is required in terms of Part 94 to maintain an operations manual, the latter shall include a maintenance control manual in the format as prescribed in Document SA-CATS 44.

PART 96: COMMERCIAL OPERATION OF NON-TYPE CERTIFICATED AIRCRAFT

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SUBPART 1: **GENERAL**

Applicability

96.01.1 (1) This Part applies to –

- (a) non-type certificated aircraft engaged in flying training or commercial air transport operations within the Republic;
- (b) non-type certificated aircraft registered in the Republic;

- (c) persons acting as flight crew members of non-type certificated aircraft registered in the Republic and engaged in flying training or commercial air transport operations; and
- (d) persons on board a non-type certificated aircraft engaged in flying training or commercial air transport operations.
- (2) A non-type certificated aircraft shall not be used in commercial air transport operations unless the operator is the holder of the appropriate air service licence issued in terms of the Air Services Licensing Act, 1990 or International Air Services Act, 1993: Provided that no amateur-built, production-built or ex-military aircraft shall be issued with a Class I or a Class II domestic air service licence, nor with any international air service licence.
- (3) An amateur-built, production-built or ex-military aircraft may be issued with a Class III, type G16, domestic air service licence for the purpose of flipping, as defined in sub-regulation (7).
- (4) A non-type certificated aircraft shall not be used for flight training unless the operator is the holder of the appropriate ATO approval, issued in terms of Part 141 of these Regulations.
- (5) The provisions of Part 24, Part 91 and Part 94 of these Regulations shall apply with the necessary changes to any non-type certificated aircraft unless specifically exempted by the provisions of this Part.
- (6) For the purpose of sub-regulation (2), tandem operations with hang-gliders, paragliders or parachutes, even if carried out for remuneration or reward, shall not be considered to be the providing of an air service as defined in the Air Services Licensing Act, 1990 or International Air Services Act, 1993 nor to be a commercial air transport operation, as defined in Part 1 of these Regulations.
- (7) For the purpose of sub-regulation (3), flipping is defined as the carrying of fare-paying passengers for the purpose of sight-seeing, and such operations shall be restricted as follows:
 - (a) flights shall commence and end at the same aerodrome or helicopter landing site without any intermediate landing, and without any disembarking taking place by any means while the aircraft is in flight;
 - (b) the duration of flights shall not exceed one hour of flight time; and
 - (c) the number of passengers carried, whether fare-paying or carried for free, shall not exceed nine.
- (8) For the purpose of sub-regulation (3), flipping is defined as the carrying of fare-paying passengers for the purpose of sight-seeing, and such operations shall be restricted as follows:
 - (a) flights shall commence and end at the same aerodrome or helicopter landing site without any intermediate landing, and without any disembarking taking place by any means while the aircraft is in flight (parachute, rappeling, etc.);
 - (b) the duration of flights shall not exceed one hour of flight time;
 - (c) the number of passengers carried, whether fare-paying or carried for free, shall not exceed nine.

SUBPART 2: FLIGHT CREW

In-flight relief of flight crew members

96.02.1 In the case of a large non-type certificated aircraft engaged in commercial air transport operations, the provisions of regulation 121.02.2 of Part 121 shall apply with the necessary changes.

Cabin crew member compliment

96.02.2 In the case of a large non-type certificated aircraft engaged in commercial air transport operations, the provisions of regulations 121.02.5 to 121.02.9 (both inclusive) of Part 121 shall apply with the necessary changes.

Flight time and duty periods

- **96.02.3** (1) The operator of a non-type certificated aircraft engaged in commercial air transport shall
 - (a) establish a scheme for the regulation of flight time and duty periods for each flight crew member;
 - (b) include the scheme referred to in paragraph (a) in the operations manual referred to in regulation 96.04.1;
 - (c) ensure that each flight crew member complies with the provisions of the scheme referred to in paragraph (a);
 - (d) not cause or permit any flight crew member to fly in the aircraft if such operator knows or has been made aware that such flight crew member
 - (i) will exceed the flight time and duty periods referred to in sub-regulation (1)(a) while on flight duty; or
 - (ii) is suffering from or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue which may endanger the safety of the aircraft or its flight crew members and passengers; and
 - (e) not schedule a flight crew member for active flight duty for a period exceeding eight consecutive hours during any given flight time and duty period unless authorised in the scheme referred to in paragraph (a).
- (2) Except with the approval of the Director, the flight time and duty scheme of the operator shall not be in conflict with the provisions of regulation 91.02.3(3).
- (3) The provisions to be included in a flight time and duty scheme referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 96.

Training and checking

- **96.02.4** (1) The owner of a non-type certificated aircraft engaged in commercial air transport operations shall establish and maintain a ground and flight training and recurrent training programme for flight crew members in his permanent or part-time employ.
- (2) The training shall be provided by the holder of an ATO approval issued in terms of Part 141.
 - (3) Training shall be in accordance with the syllabi prescribed in Document SA-CATS 96.

SUBPART 3: DOCUMENTATION AND RECORDS

Operations manual

96.03.1 (1) The operator of a non-type certificated aircraft used for the purpose of flight training or in commercial air transport operations shall draw up an operations manual containing all information required under this Part and setting out the manner in which such operator will

conduct the flying training for which he or she has been approved in terms of Part 141 of these Regulations, or operate the air service for which such operator is licensed in terms of the Air Services Licensing Act, 1990, as the case may be.

- (2) The operator shall submit the operations manual in duplicate to the Director for approval.
 - (3) If the Director is satisfied that the operator –
 - (a) will comply with the provisions of regulation 96.04.7; and
 - (b) will not conduct flying training contrary to the conditions of the ATO approval held, or operate the air service concerned contrary to any provision of the Act or the Air Services Licensing Act, 1990, as the case may be,

the Director shall certify in writing on both copies of the operations manual that such manual has been approved, and shall return one copy of the approved operations manual to the operator.

- (4) The operator shall submit an amendment to an approved operations manual in duplicate to the Director for approval.
- (5) If the Director is satisfied that the operator will comply with the provisions of subregulation (3)(a) and (b), the Director shall certify in writing on both copies of the amendment to the approved operations manual that such amendment has been approved, and shall return one copy of the approved amendment to the operator.
- (6) The operator shall at all times operate the non-type certificated aircraft, when operated in terms of this Part, in accordance with the approved operations manual or an approved amendment thereto.
 - (7) The operator shall –
 - (a) ensure that all operations personnel are able to understand the technical language used in those sections of the operations manual which pertain to their duties;
 - (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight, are easily accessible to the flight crew members on board;
 - (c) make the operations manual available for the use and guidance of operations personnel;
 - (d) provide the flight crew members with their own personal copy of the sections of the operations manual which are relevant to the duties assigned to them;
 - (e) keep the operations manual up to date; and
 - (f) keep the operations manual in a safe place.
- (8) The contents of the operations manual shall not contravene the conditions contained in the operating certificate issued to the operator in terms of regulation 96.04.3.
- (9) The structure and contents of the operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 96.

Exemptions

96.03.2 Notwithstanding the provisions of regulation 91.03.1, a person may operate an amateur-built or production-built aircraft, including a microlight aeroplane, while conducting flight training or in a commercial air transport operation without carrying on board any of the documents prescribed in the foregoing regulation should such carriage not be safely or practically possible.

Disclosure

- **96.03.3** (1) A provider of flight training using, or a commercial air transport operator of, a non-type certificated aircraft shall disclose to any student or any fare-paying passenger to be carried on board the aircraft, as applicable, the warning that the aircraft is an aircraft not required to comply with all the regulations for type-certificated aircraft and that boarding the aircraft is at one's own risk.
- (2) The disclosure referred to in sub-regulation (1) shall be made to any potential student before commencing flight training, or to any passenger before a ticket is purchased by means suitable to the kind of operation and shall be repeated in the flight training agreement or on the passenger ticket or similar contract of carriage, as applicable.

SUBPART 4: OPERATING CERTIFICATE

Operating certificate

- **96.04.1** The operator of a non-type certificated aircraft used for the provision of flight training or in commercial air transport operations, as the case may be, shall not operate the aircraft unless such operator is the holder of a valid
 - (a) ATO approval, issued in terms of Part 141; or
 - (b) licence issued in terms of the Air Services Licensing Act, 1990; and
 - (c) operating certificate issued in terms of regulation 96.04.3.

Application for operating certificate

96.04.2 An application for an operating certificate shall be made to the Director in the appropriate form as prescribed in Document SA-CATS 96 and shall be accompanied by the appropriate fee as prescribed in Part 187.

Adjudication of application for operating certificate

- **96.04.3** (1) In considering an application referred to in regulation 96.04.2 the Director may conduct the investigation he or she deems necessary.
- (2) An application shall be granted and the operating certificate issued if the Director is satisfied that
 - (a) the applicant will comply with the provisions of regulation 96.04.7; and
 - (b) the applicant will not conduct flight training contrary to the ATO approval held, or operate the air service concerned contrary to any provision of the Act, or the Air Service Licensing Act. 1990.
- (3) If the Director is not so satisfied, he or she shall notify the applicant, stating the reasons in the notification, and grant the applicant the opportunity to rectify or supplement any defect within the period determined by the Director, after which period the Director shall grant or refuse the application concerned.
- (4) An operating certificate shall be issued on the appropriate form as prescribed in Document SA-CATS 96, under such conditions that the Director may determine.

Period of validity of operating certificate

- **96.04.4** (1) An operating certificate shall be valid for such period as may be determined by the Director: Provided that such period shall not exceed a period of 12 months from the date of issuing thereof.
- (2) If the holder of an operating certificate applies at least 30 days prior to the expiry thereof for a new operating certificate, that first-mentioned operating certificate shall, notwithstanding the provisions of sub-regulation (1), remain in force until such holder is notified by the Director of the result of the application for the issuing of a new operating certificate.

Safety inspections and audits

- **96.04.5** (1) An applicant for an operating certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of an application made in terms of regulation 96.04.2.
- (2) The holder of an operating certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this part.

Duties of holder of operating certificate

- **96.04.6** The holder of an operating certificate shall –
- (a) notify the Director in the manner as prescribed in Document SA-CATS 96, before any change is effected to the particulars on the operating certificate;
- (b) keep the operating certificate in a safe place and produce such operating certificate to an authorised officer, inspector or authorised person for inspection if so requested by such officer, inspector or person authorised person; and
- (c) not commence or continue with the air service concerned unless such holder is the holder of a valid operating certificate.

Register of operating certificates

- **96.04.7** (1) The Director shall maintain a register of all operating certificates issued in terms of this Part.
 - (2) The register shall contain the following particulars –
 - (a) the full name and, if any, the trade name of the holder of the operating certificate;
 - (b) the postal address of the holder of the operating certificate;
 - (c) the number of the operating certificate issued to the holder;
 - (d) particulars of the type of air service for which the operating certificate was issued;
 - (e) particulars of the category of aircraft for which the operating certificate was issued; and
 - (f) the date on which the operating certificate was issued.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within 30 days from the date on which the operating certificate is issued by the Director.
 - (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 5: MAINTENANCE

General

- **96.05.1** (1) A non-type certificated aircraft used for the provision of flight training or in commercial air transport operations shall be maintained by a licensed AME or AMO with the appropriate rating or by a person approved for the purpose by the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, in accordance with the provisions of Part 24 and Part 43 of these regulations, as they with the necessary changes apply, and as has been specified in the approved Maintenance Control Manual.
 - (2) The Maintenance Control Manual shall -
 - (a) be drawn up in the format as prescribed in Technical Standard 44.03.2 in Document SA-CATS 44;
 - (b) prescribe who may carry out maintenance on the aircraft, and incorporate the terms of the contract between the operator and any outside maintenance personnel or organisation responsible for all or part of the maintenance, if any; and
 - (c) prescribe the environmental conditions under which maintenance may be carried out and, if applicable, the special tools and equipment that are to be used in maintenance.
- (3) Notwithstanding the provisions of sub-regulations (1) and regulation 96.01.1(4), the privilege extended by regulation 44.01.13 shall apply only in respect of an owner who is the holder of the valid applicable AME licence and ratings issued in terms of Part 66.

Certificate of airworthiness

96.05.2 The authority to fly for a non-type certificated aircraft approved to be operated for the provision of flight training or in commercial air transport operations is issued in the form of a certificate of airworthiness for non-type certificated aircraft as prescribed in Document SA-CATS 44.

PART 105: OPERATION OF PARACHUTES AND DROP ZONES

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SUBPART 1: GENERAL

Applicability

105.01.1 (1) This Part applies to the operation of parachutes.

- (2) This Part does not apply to
 - (a) persons making emergency descents; or
 - (b) persons making base jumps.

Persons making parachute descent

- **105.01.2** (1) Any person making a parachute descent shall
 - (a) be a bona fide member of an aviation recreation organisation designated by the Director or organisation designated for the purpose as the case may be in terms of Part 149;
 - (b) be authorised by such approved aviation recreation organisation to make such parachute descent;
 - (c) comply with the privileges and limitations of the authorisation referred to in paragraph (b);
 - (d) comply with the standards and procedures determined by such approved aviation recreation organisation;
 - (e) comply with the currency requirements determined by such approved aviation recreation organisation.
- (2) Notwithstanding anything in this part, no parachuting activities shall be undertaken in conflict with the applicable the aviation recreation organisation's approved manual of procedures.

Alcohol and drugs

105.01.3 No person shall make a parachute descent while under the influence of alcohol or a drug having a narcotic effect, to the extent where the safety of such person or other persons is likely to be endangered.

Securing of articles

105.01.4 Any article or object that forms part of the parachutist's acceptable gear or accessories, may be carried on board if secured through acceptable means by the respective person performing the parachute jump.

Hazard

105.01.5 No person shall make a parachute descent if such parachute descent constitutes, or is likely to constitute, a safety hazard to air traffic, persons or property in the air or on the ground, the aircraft concerned or its occupants.

Exit from aircraft

- **105.01.6** (1) The loadmaster or chief instructor or instructor on duty or jump master on board the aircraft, shall give an instruction to proceed with the parachute descent, after approval has been received from the PIC, or when the aircraft is positioned correctly.
- (2) Each person making a parachute descent shall only exit from the aircraft and commence the parachute descent, on instruction of the loadmaster or chief instructor or instructor on duty or jump master on board the aircraft nominated to do so.

Minimum parachute opening altitude

105.01.7 Each person making a parachute descent shall activate the main parachute at not less than 2 000 feet AGL, except for –

- (a) a student parachutist, who shall activate the main parachute at not less than 2 500 feet AGL;
- (b) a person carrying out a tandem parachute descent, who shall activate the main parachute at not less than 4 000 feet AGL;
- (c) a demonstration or display parachutist who may exit and activate their parachute at an altitude less than 2000 feet AGL as per the aviation recreation organisation's approved manual of procedures; or
- (d) a parachutist performing a jump as part of a unusual descent may exit and activate their parachute at an altitude less than 2000ft AGL as approved by the aviation recreation organisation's national safety and training officer and the body designated for the purpose.

Parachute drop zone

- **105.01.8** (1) All parachute descents, except emergency and display parachute descents, shall be made within a parachute drop zone approved by the designated body.
- (2) A person may make a parachute descent outside a parachute drop zone, if the descent is authorised by the designated body.

Parachute landing area

- **105.01.9** (1) Each person making a parachute descent is required to land on a parachute landing area authorised by the designated body.
- (2) Simultaneous parachute and aircraft movements may be conducted at aerodromes if the parachute landing area is located clear of
 - (a) any movement area in use;
 - (b) the strip area of any runway in use;
 - (c) the taxiway minimum separation distances; and
 - (d) the approach and take-off area of any runway or heliport in use.

Ground signal

- **105.01.10** (1) A person making a parachute descent shall not land at an unattended aerodrome unless the ground signal, as prescribed in Document SA-CATS 105, is displayed.
- (2) When parachute descents are being performed by night, the ground signal shall be illuminated.

Controlled airspace

- **105.01.11** Each person making a parachute descent in controlled airspace shall
 - (a) have an air traffic control clearance; and
 - (b) within a CTA/E, coordinate the parachute descent with the appropriate ATSU.

Descents into attended aerodromes

105.01.12 Each person making a parachute descent onto an attended aerodrome shall have prior approval from the owner or operator of the aerodrome.

Descents into unattended aerodromes

105.01.13 Each person making a parachute descent onto an aerodrome where no ATS is provided, shall –

- (a) have prior approval from the owner or operator of the aerodrome;
- (b) observe other aerodrome traffic operating within the parachute descent zone for the purpose of avoiding collision;
- (c) conform with or avoid the pattern of traffic formed by other aircraft operating within the parachute descent zone at the aerodrome; and
- (d) land within the parachute landing area.

Descents within restricted areas

105.01.14 A person shall not make a parachute descent within the restricted area of an aerodrome unless he or she has obtained the authorisation referred to in regulation 91.06.20.

Visibility and clearance from cloud

105.01.15 No person shall make a parachute descent above or though cloud if the visibility is less than the visibility and distance from cloud as prescribed in SA- CATS 105, unless –

- (a) performed in accordance with the aviation recreation organisation's approved manual of procedures; and
- (b) has the prior approval from the Chief Instructor responsible at a particular drop zone.

Descent from unpressurised aircraft

105.01.16 Each person making a parachute descent from an unpressurised aircraft shall –

- (a) if between an altitude of FL120 and FL170 for longer than 30 minutes continuously, use supplementary oxygen;
- (b) if between an altitude of FL150 and FL180 for longer than 15 minutes continuously, use supplementary oxygen until immediately prior to exiting the aircraft and has received instruction on the use of oxygen equipment and the effects of Hypoxia; and

(c) if between an altitude of FL180 or higher for more than 10 minutes continuously, use supplementary oxygen until immediately prior to exiting the aircraft.

Descent from pressurised aircraft

105.01.17 Each person making a parachute descent from a pressurised aircraft up to FL200 shall use supplementary oxygen during the period from immediately prior to decompression to immediately prior to exiting the aircraft.

Descent from above FL200

- **105.01.18** (1) Each person making a parachute descent from above FL200 shall comply with the standards, procedures and training requirements determined by the applicable aviation recreation organisation's approved manual of procedures.
- (2) No person shall make a parachute descent from above FL200 unless he or she has the prior written approval of the designated body.
- (3) Each person making a parachute descent from above FL200 shall, in addition to sub-regulation (1) above and regulation 105.01.17, use individual supplementary oxygen during the dispatch and descent.

Seats, safety belts and harnesses

105.01.19 Notwithstanding anything contained in regulation 91.07.18 parachutists shall not be required to occupy a seat or berth with a safety belt or harness as the case may be unless such a person is a passenger who does not intend to perform a parachute or tandem descent.

NTCA aircraft used for parachute drop operations

105.01.20 No NTCA aircraft may be used for parachute drop operations unless –

- (a) such aircraft has been considered and found as suitable for the purpose by the applicable aviation recreation organisation and the designated body; and
- (b) such aircraft is issued with a valid authority to fly.

Pilots performing flights for purposes of parachute operations

105.01.21 Any pilot performing a flight for the purposes of a parachute drop shall –

- (a) be the holder of a valid pilot licence issued in terms of Part 61 or Part 62 as the case may be;
- (b) have no less than 100 hours as PIC;
- (c) have received an appropriate briefing on the intended parachute drop operations in accordance with the applicable the aviation recreation organisation's approved manual of procedures; and
- (d) have the briefing in paragraph (c) above entered and signed in the pilots logbook.

SUBPART 2: PARACHUTE EQUIPMENT

Main parachute

105.02.1 Each person or tandem pair making a parachute descent shall be equipped with a main parachute which complies with the requirements prescribed by the applicable the aviation recreation organisation's approved manual of procedures.

Reserve parachute

105.02.2 Each person or tandem pair making a parachute descent shall be equipped with a reserve parachute assembly which —

- (a) complies with the requirements prescribed by the applicable aviation recreation organisation's approved manual of procedures;
- (b) has been inspected, re-packed and signed-off within the previous six months by a parachute technician authorised by the applicable aviation recreation organisation's approved manual of procedures;
- (c) where necessary, has been repaired in accordance with
 - (i) the standards of such designated body or institution; and
 - (ii) the instructions of the manufacturer.

Night descent

105.02.3 Each person making a parachute descent by night shall be equipped with an illuminated altimeter.

Water descent

- **105.02.4** (1) Each person making a parachute descent into water shall wear a serviceable, flotation device capable of supporting the person and equipment.
- (2) Each person or group of persons making a parachute descent shall ensure that there is a rescue tender stationed at the parachute landing area to retrieve such persons.
- (3) Each person making a parachute descent into water shall be briefed on the procedures for water jumps

Altimeter

105.02.5 Each student parachutist or solo jumper making a free-fall descent of more than 15 seconds shall –

- (a) be equipped with, and use, a serviceable altimeter of a type suitable for parachuting; and
- (b) prior to take-off, zero the altimeter to the parachute landing area height.

Automatic activation devices

105.02.6 Each student parachutist or tandem master making a parachute descent, and every person making a parachute descent from above FL200, shall, in addition to regulation 105.02.2, be equipped with an automatic activation device on the reserve parachute, which has been —

- (a) certified as compatible with the reserve parachute assembly on the parachute assembly packing-record by a parachute technician authorised by the designated body; and
- (b) calibrated in accordance with the manufacturer's operating instructions;
- (c) set to operate the reserve parachute at a minimum altitude of
 - (i) for an individual parachute descent, 1 000 feet AGL or such lower altitude as predetermined and set within the automatic activation device by the manufacturer of such device for the category of use; and
 - (ii) for a tandem parachute descent, 2 000 feet AGL or such lower altitude as predetermined and set within the automatic activation device by the manufacturer of such device for use on tandem descents:
- (d) inspected by the parachute technician in accordance with the manufacturer's Instructions.

Helmets

105.02.7 Each student parachutist making a parachute descent shall wear a serviceable, rigid, protective helmet of a type authorised by the applicable aviation recreation organisation's approved manual of procedures.

Parachute descent near water

105.02.8 Each student parachutist making a parachute descent within one nautical mile of a coastline, harbour, lake or major river shall wear a serviceable flotation device capable of supporting the person and equipment.

Tandem harness

105.02.9 Each tandem rider making a tandem descent shall wear a harness which is –

- (a) authorised by the applicable aviation recreation organisation's manual of procedures; and
- (b) properly secured to the matching tandem master harness approved by the applicable aviation recreation organisation's manual of procedures.

SUBPART 3: PARACHUTE MAINTENANCE

Parachute technician (Rigger)

105.03.1 Each parachute technician shall –

- (a) be a current *bona fide* member of the holder of an aviation recreation organisation approval issued in terms of Part 149;
- (b) be at least 18 years old;
- (c) be authorised as a parachute technician by the applicable aviation recreation organisation;
- (d) comply with the currency requirements determined by such aviation recreation organisation;
- (e) comply with the privileges and limitations of his or her authorisation; and
- (f) comply with the operational standards and procedures determined by the applicable aviation recreation organisation.

Safety directives

- **105.03.2** A person shall not make a parachute descent unless the parachute assembly complies with
 - (a) any applicable safety directive issued by the aviation recreation organisation or the designated body; and
 - (b) all mandatory modifications or instructions issued by the manufacturer.

Parachute serviceability

- **105.03.3** (1) Any person who finds a parachute assembly to be unserviceable or not airworthy shall have the assembly
 - (a) re-inspected and returned to a serviceable and airworthy state; or
 - (b) withdrawn from service.
- (2) Each owner of a parachute assembly shall ensure that it is in a serviceable and airworthy condition before use.

Modification and repair

105.03.4 A person shall not make a parachute descent with an emergency or reserve parachute, or harness and container system, which has been modified or repaired, in a manner that may affect the airworthiness of the parachute assembly, unless such emergency or reserve parachute has been re-inspected and re-assessed by a parachute technician authorised by the applicable aviation recreation organisation.

Parachute assemblies

105.03.5 (1) Subject to the provisions of sub-regulations (2) and (3), no person shall make a parachute descent unless he or she has checked the state of serviceability of the parachute assembly by –

- (a) reference to the assembly packing record with the equipment;
- (b) a comprehensive external check; and
- (c) checking the correct setting of the applicable equipment.
- (2) A student parachutist shall not make a parachute descent unless his or her parachute assembly has been checked in accordance with sub-regulation (1) by a person, authorised to supervise the descent by the applicable the aviation recreation organisation's approved manual of procedures.

Parachute records

- **105.03.6** (1) Each owner of an emergency or reserve parachute assembly, shall maintain a permanent record of the assembly in
 - (a) a logbook; or
 - (b) a separable log page, approved by the applicable aviation recreation organisation.
- (2) The owner referred to in sub-regulation (1) shall make the record available for inspection when required by an authorised officer, inspector or authorised person.

PART 108: AIR CARGO SECURITY

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SUBPART 1: GENERAL

Applicability

108.01.1 This Part applies to all persons engaged in acceptance, forwarding, storage and carriage of cargo by air and shall regulate:

- (a) aviation security in respect of all cargo entering the airside of an aerodrome;
- (b) security measures required for the storage and carriage of cargo by an air carrier;
- (c) training requirements for personnel involved in handling air cargo; and
- (d) any other aspect incidental to air cargo security.

Requirements for carriage by air of cargo

- **108.01.2** (1) Any person engaged in the acceptance or storage or forwarding or handling of cargo intended for carriage by air in an air carrier shall comply with the security controls prescribed by this Part.
- (2) No air carrier shall carry unknown cargo.
- (3) Air carriers shall treat all unaccompanied baggage as unknown cargo.

- (4) Any regulated agent engaged in the acceptance and/or storage and/or forwarding and/or handling of cargo to be carried by air shall hold a certificate of approval issued by the Director: Provided that any person in the employ of a regulated agent and involved with known cargo, shall be required to complete the training prescribed in regulation 108.06.1 and hold a certificate of proficiency for such training.
- (5) A regulated agent shall draw up an air cargo security manual containing all information prescribed by Document SA-CATS 108 and setting out the manner in which such regulated agent will operate. Such a manual shall be submitted to the Director for approval.
- (6) Each regulated agent shall have a designated official responsible for the implementation, application and supervision of the security controls as prescribed by this Part and the Document SA-CATS 108 and such designated official shall undergo the training as prescribed by Document SA-CATS 108.
- (7) Any person applying for approval as a regulated agent or accreditation as a known consignor, shall permit an authorised officer, inspector or authorised person designated by the Director to carry out inspections and audits which may be necessary to verify whether the security measures regarding the handling, transportation and storage of known cargo comply with the requirements of this Part.
- (8) The holder of a certificate of approval or a accreditation certificate shall permit an authorised officer, inspector or authorised person designated by the Director to carry out such inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.
- (9) The holder of a certificate of approval or a accreditation certificate shall permit an authorised officer, inspector or authorised person designated by the Director to conduct random checks of cargo, emanating from and through regulated agents or known consignors, to ensure compliance with this Part.

Issuing of air cargo security directives

108.01.3 The Director may issue air cargo security directives in respect of cargo to be carried by air where it is deemed necessary to improve standards of aviation security. If the Director issues an air cargo security directive, the regulated agent holding a certificate of approval issued under the regulations in this Part shall –

- (a) immediately make amendments to the security manual in line with the security directive and submit such amendments to the Director for approval; and
- (b) upon approval of the security manual amendments, make such changes available to all persons engaged in the regulated agent's acceptance, storage, forwarding and handling of air cargo.

SUBPART 2: DUTIES AND FUNCTIONS OF REGULATED AGENTS AND KNOWN CONSIGNORS

Duties of regulated agents

108.02.1 Any person approved by the Director as a regulated agent shall –

- (a) maintain records of all shipping documents documenting the transport and handling history in accordance with the requirements of Document SA-CATS 108;
- (b) ensure that, after the receipt of known cargo, and whilst such cargo is under his or her control, it is safeguarded from unlawful interference in accordance with the security measures stipulated in the security manual, referred to in sub-regulation 108.01.2(5);
- (c) ensure that the acceptance and handling of cargo and shipping documentation is carried out by trained personnel, who have received job-specific cargo security training, as stipulated in the security manual, required in terms of Document SA-CATS 108;
- (d) apply any physical checks or screening in the manner prescribed in Document SA-CATS 108, for the purpose of determining whether consignments of cargo contain any explosives, incendiary devices or any other prohibited or harmful articles which may be used to commit acts of unlawful interference;
- (e) maintain records of screening applied to cargo;
- (f) ensure that known cargo is sealed with tamper-evident seals or tamper-evident packaging and that such seals or packaging are intact;
- (g) label or mark known cargo in the manner as prescribed in Document SA-CATS 108;
- (h) endorse and submit documentation relating to known cargo in the manner prescribed in Document SA-CATS 108;
- (i) check, verify and record the identity of persons tendering cargo;
- conduct background checks on all personnel recruited for accepting all cargo and processing shipping documentation and storing, forwarding and/or handling of known cargo intended for carriage by air;
- (k) conduct criminal record checks every 24 months on all personnel employed in the adherence of all cargo and processing shipping documentation and storing, forwarding or handling or known cargo intended for carriage by air;
- (I) ensure that personnel employed to conduct Standard Air Cargo Security Training and familiarisation training as stipulated in Document SA-CATS 108 have been subjected to background checks;
- (m) ensure that each consignment of known cargo is accompanied by a consignment security declaration in the manner prescribed in Document SA-CATS 108.

Duties of regulated agents regarding known consignors

- **108.02.2** (1) All regulated agents who conduct business with and receive known cargo from known consignors shall
 - (a) verify whether the known consignor is a holder of a known consignor accreditation certificate issued in terms of this Part;
 - (b) document the identity and address of the known consignors and advise the Director of the details of these known consignors;
 - (c) have on record a declaration from a known consignor stating that:
 - (i) consignments of known cargo are prepared in secured premises;
 - (ii) all personnel employed to handle known cargo and shipping documentation have been subjected to background checks and have received job-specific cargo security familiarisation training as stipulated in Document SA-CATS 108;
 - (iii) consignments of known cargo are protected from unlawful interference during preparation, storage and transportation;
 - (iv) consignments do not contain any explosives or other dangerous goods or devices or substances unless declared as such;
 - (v) air waybills, despatch notes or other valid transportation documents have been signed by authorised personnel; and
 - (d) conduct random quality control checks of the premises and cargo of known consignors to ensure that the requirements of this Part are adhered to, and maintain documented records of such quality control checks.
- (2) The declaration referred to in sub-regulation (1)(c) shall be valid for a period of twelve months from the date of signature by the consignor.
- (3) Cargo may be opened and examined for security reasons.

Requirements for known consignor

- **108.02.3** (1) Any person who has a known consignor relationship with a regulated agent and wishing to be accredited and listed by the Authority as a known consignor shall apply to the Director for accreditation as a known consignor.
- (2) The person wishing to become a known consignor shall ensure that:
 - (a) consignments of known cargo are packed and secured by the known consignor in secure premises;
 - (b) all personnel employed to handle cargo to be shipped by air and shipping documentation have been subjected to background checks and have received job-specific cargo security familiarisation training as stipulated in the SA-CATS 108;

- (c) all personnel employed to conduct familiarisation training as stipulated in Document SA-CATS 108 have been subjected to background checks;
- (d) consignments of known cargo are protected from unlawful interference during preparation, storage and transportation;
- (e) procedures relating to the protection, storage and transportation of known cargo are documented;
- (f) records of all shipping documents are maintained in accordance with the requirements of Document SA-CATS 108;
- (g) all business is conducted in line with the requirements of the security manual of each regulated agent with whom he or she conducts business.
- (h) consignments of known cargo are sealed with tamper-evident seals or tamper-evident packaging and that such seals or tamper-evident packaging remain intact whilst in his or her possession.

SUBPART 3: SECURITY CONTROLS

General

- **108.03.1** (1) No air carrier may transport cargo by air unless a valid air waybill or other valid transport documentation accompanies it.
- (2) Any person tendering a diplomatic bag for carriage by air shall ensure that it is properly sealed and marked and may only be carried by air, without an airway bill, when accompanied by an employee of the respective embassy holding:
 - (a) a valid passport issued to the respective embassy employee;
 - (b) a letter from the official in charge of the embassy from which the diplomatic bag originates, authorising the specific employee to accompany the diplomatic bag.
- (3) Diplomatic cargo accompanied by an air waybill must comply with the following requirements:
 - (a) The status and number of packages shall be clearly indicated on the air waybill.
 - (b) The cargo must be properly sealed and marked and bearing visible external marks of its character.
 - (c) The person tendering the cargo must be duly authorised in writing by the sending state or originating embassy and shall carry official identification.
- (4) Diplomatic cargo shall be exempt from screening. The use of sniffer dogs will however be allowed.
- (5) The provisions of regulation 108.03.7(2) applies with the necessary changes to diplomatic cargo.

Known cargo

- **108.03.2** (1) No cargo may be placed on board an air carrier's aircraft
 - (a) unless it has been subjected to security controls prior to loading whereupon it is deemed to be known cargo and shall be declared as such; or
 - (b) unless it has been packed and made known and secured by a known consignor and handed to a regulated agent in compliance with the provisions of this Part.
- (2) Known cargo, after acceptance by a regulated agent, shall be kept in a secure area, as prescribed in the security manual, to protect it from unlawful interference whilst in the custody of a regulated agent.
- (3) Where known cargo is forwarded from a known consignor to a regulated agent or from one regulated agent to another regulated agent and is kept secure, such cargo shall continue to be treated as known cargo.
- (4) The air carrier shall ensure that cargo is at all time safeguarded whilst on the ramp prior to loading on-board an aircraft.
- (5) Prior to loading on-board a commercial air transport aircraft, the air carrier shall ensure that all cargo consignments are visually inspected to ensure that they have not been tampered with.

Unknown cargo

- **108.03.3** (1) Cargo originating from a consignor that has not been subjected to the security controls prescribed in this Part shall be treated as unknown cargo.
- (2) Known cargo that, after acceptance by a regulated agent, has not been stored in a secure area, as stipulated in the security manual, shall be treated as unknown cargo.
- (3) Known cargo, where the seals on the packaging are broken or where there is evidence that the seals or the cargo has been tampered with, except where the cargo has been resealed with tamper seals or tamper-evident packaging_by a regulated agent, shall be treated as unknown cargo.
- (4) Cargo presented as unknown cargo shall be subjected to security controls prescribed in this Part and Document SA-CATS 108 before being loaded into an aircraft.

Mail

- **108.03.4** (1) The Postal Company may apply for a certificate of approval as a regulated agent in terms of regulation 108.05.1.
- (2) Mail received by the Postal Company, that is to be tendered for carriage by air, shall be -
 - (a) subjected to screening, sealed; and
 - (b) accompanied by a valid postal manifest listing the numbers of secured bags.

- (3) The Postal Company shall be responsible for the screening and sealing of mail before submitting the mail for carriage by air.
- (4) For the purpose of excluding the introduction of explosives, incendiary devices, or other prohibited or harmful articles on board an air carrier's aircraft, the following measures shall be applied:
 - (a) the Postal Company shall ensure that mail is kept in locked or closed containers and protected against unlawful interference prior to being placed in mail bags;
 - (b) prior to loading on-board a commercial air transport aircraft, the airline operator, or his or her ground handling agent shall ensure that all mail bags are visually inspected to ensure that they have not been tampered with;
- (5) At times of high security alert declared by the Authority, the following additional measures shall be implemented:
 - (a) The Postal Company shall declare that mail has been inspected and searched for explosives, incendiary and other prohibited or harmful articles which may be used to commit acts of unlawful interference.
 - (b) In the event that the security of mail be in doubt, the Postal Company shall not tender or accept mail for carriage by air.

Express cargo and mail

108.03.5 (1) A regulated agent or Postal Company tendering express cargo and mail for carriage on air carrier shall ensure that such express cargo and mail has been subjected to security controls in terms of Document SA-CATS 108.

Transhipment cargo and mail

- **108.03.6** (1) Transhipment cargo and mail arriving by air, for onward carriage by air, need not be screened or searched provided that it was subjected to security controls at the point of departure and is protected against unlawful interference en route and at the transit points.
- (2) Transhipment cargo or mail arriving by air, road, rail or sea for onward carriage by air that has not been subjected to security controls at the point of departure or en route and at the transit points, should be treated as unknown cargo and screened or searched accordingly.

Exemptions

- 108.03.7 (1) The security controls required by this Part shall not be applicable in respect of
 - (a) transhipment cargo, as provided for in regulation 108.03.6(1);
 - (b) human remains;
 - (c) live animals;
 - (d) bona fide consignments of life-saving materials or other essential medical supplies, human organs, blood plasma or similar materials; or
 - (e) any nuclear materials;

- (2) The regulated agent tendering consignments for carriage by air that are exempted from security controls in terms of regulation 108.03.7 (1) shall ensure that such consignments are
 - (a) clearly declared on shipping documents as such;
 - (b) physically checked upon receipt for signs of tampering;
 - (c) subjected to documentary checks to establish on face value the correctness and sufficiency of information on any document; and
 - (d) protected from unauthorised interference at all times.
- (3) The cargo mentioned in sub-regulation (1) is only exempted from security controls if it is tendered by a regulated agent.

Right of inspection and refusal of carriage

- **108.03.8** Any air carrier or regulated agent shall have the right
 - (a) to examine, or cause to be examined by his or her handling agent, the packaging and contents of all cargo tendered for carriage by air, and to inquire into the correctness or sufficiency of information or documentation submitted in respect of any cargo; and
 - (b) without assuming any liability, to refuse, delay or return any cargo, if there is a reasonably belief that the cargo may contain explosives or dangerous devices.

SUBPART 4: SECURITY SCREENING - EQUIPMENT AND EXPLOSIVE DETECTION DOG TEAMS

Requirements for security screening equipment

- **108.04.1** (1) Any equipment operated by an air carrier or regulated agent to screen cargo, shall meet the minimum technical specifications as prescribed in Document SA-CATS 108.
- (2) Any explosive detection dog team utilised by an air carrier or regulated agent to screen cargo shall meet the minimum competency requirements set out in Document SA-CATS 108.
- (3) (a) Any assessor wishing to conduct competency assessments of explosive detection dog teams shall apply to the Director for approval and be affiliated to an approved training organisation under Part 141, or Authority recognised state entity.
- (b) Such approval shall require renewal every 12 months.
- (4) Any assessor wishing to conduct competency assessments of explosive detection dog teams shall meet the minimum competency requirements set out in Document SA-CATS 108.
- (5) Any explosive detection dog team utilised by an air carrier or regulated agent to screen cargo shall meet the minimum deployment standards set out in Document SA-CATS 108.

SUBPART 5: APPROVALS

Application for approval as a regulated agent

108.05.1 An application for a certificate of approval as a regulated agent and renewal of such a certificate of approval shall –

- (a) be made to the Director in the appropriate prescribed format;
- (b) include duplicate copies of the air cargo security manual of procedure referred to in regulation 108.01.2 (5); and
- (c) be accompanied by the appropriate fee or fees as prescribed in Part 187 of these Regulations.

Certificate of approval

108.05.2 (1)(a) The Director may carry out an inspection on the operation of an applicant wishing to be approved as a regulated agent, to ascertain whether he or she is able to comply with the provisions of this Part.

- (b) A fee as prescribed in Part 187 shall be paid for such inspection.
- (2) If the Director is satisfied with the applicant's security manual and premises and that the applicant is able to comply with the provisions of this Part, the Director shall
 - (a) certify in writing on both copies of the security manual that these documents have been approved;
 - (b) return one copy of the approved security manual to the applicant; and
 - (c) issue to the applicant a certificate of approval as regulated agent in the prescribed format
- (3) The regulated agent shall submit all amendments to an approved security manual to the Director for approval.
- (4) If the Director is satisfied that the amendments will not contravene the provisions of this Part, the Director shall certify in writing on both copies of the amendment to the approved security manual that such amendment has been approved, and shall return one copy of the approved amendment to the regulated agent.
- (5) The regulated agent shall at all times operate in accordance with the approved security manual or an approved amendment thereto.
- (6) The certificate of approval shall be valid for a period of 12 months from the date of issue.

Renewal of certificate of approval

108.05.3 (1) The holder of a certificate of approval shall apply to the Director for the renewal of such certificate no later than two months before the date on which such approval expires.

- (2) In considering an application for renewal of the certificate of approval the Director may conduct the investigation he or she deems necessary to ascertain whether the applicant continues to comply with the requirements of this Part.
- (3) An application shall be granted and the certificate of approval issued if the Director is satisfied that the applicant complies with the provisions of this Part.
- (4) If the Director is not so satisfied, he or she shall notify the regulated agent, stating the reasons in the notification, and grant the regulated agent the opportunity to rectify or supplement any defect within the period determined by the Director, after which period the Director shall grant or refuse the application concerned.
- (5) The application for the renewal of the certificate of approval shall be made on the prescribed form and shall be accompanied by the appropriate fee as prescribed in Part 187.
- (6) The provisions of regulation 108.05.01 shall apply with the necessary changes to the application for renewal of certificate of approval.

Duties of holder

108.05.4 A regulated agent shall at all times conduct his or her operations in accordance with the approved security manual.

Application for accreditation as known consignor

- 108.05.5 An application for accreditation certificate and renewal of such a certificate shall
 - (a) be made to the Director in the appropriate prescribed format as;
 - (b) be accompanied by the appropriate fee or fees as prescribed in Part 187.

Known consignor accreditation certificate

- **108.05.6** (1) The Director may conduct an inspection on the operation of an applicant wishing to be validated as a known consignor, to ascertain whether he or she is able to comply with the provisions of this Part, for which inspection fee shall be paid as set out in Part 187.
- (2) If the Director is satisfied that the applicants' security measures and handling transportation and storage of known cargo comply with the requirements of this Part, the Director shall issue to the applicant an accreditation certificate as a known consignor in the prescribed format.
- (3) The accreditation certificate shall be valid for a period of 12 months from the date of issue.

Designation of validator

108.05.7 (1) The Director may designate a validator of known consignors to conduct inspections on known consignors for the purpose of issuing certificates of accreditation, renewal and reissuing of such certificates.

- (2) The privileges referred to in sub-regulation (1) shall be exercised and performed according to the conditions, requirements, rules, procedures or standards as prescribed in Document SA-CATS 108.
- (3) The Director shall sign and issue to each designated validator a document which shall state the full name of such validator and contain a statement stating that
 - (a) such validator has been designated in terms of sub-regulation (1); and
 - (b) such validator is empowered to exercise the privileges referred to in sub-regulation (1).
- (4) The application to be considered for designation as referred to in sub-regulation (1) shall be accompanied by the appropriate fee as prescribed in Part 187.

Renewal of certificate of accreditation

- **108.05.8** (1) The holder of an accreditation certificate shall apply to the Director for the renewal of such certificate no later than two months before the date on which such approval expires.
- (2) In considering an application for renewal of the accreditation certificate the Director may conduct the investigation he or she deems necessary to ascertain whether the applicant continues to comply with the requirements of this Part.
- (3) An application shall be granted and an accreditation certificate issued if the Director is satisfied that the applicant will comply with the provisions of this Part.
- (4) If the Director is not so satisfied he or she shall notify the known consignor, stating the reasons in the notification, and grant the known consignor the opportunity to rectify or supplement any defect within the period determined by the Director, after which period the Director shall grant or refuse the application concerned.
- (5) The application for the renewal of an accreditation certificate shall be made on the prescribed form and shall be accompanied by the appropriate fee as prescribed in Part 187.
- (6) The provisions of regulations 108.05.05 shall apply with the necessary changes to the application for the renewal of certificate of approval.

Inspection fee

108.05.9 Anywhere a non-compliance with these Regulations is identified, necessitating further inspection, such an inspection shall be charged at the hourly rate, which excludes travelling time, as set out in Part 187.

Validation of foreign certificates

108.05.10 (1) The Director may upon application in writing, validate any foreign certificate issued for air cargo security training, if the holder of the certificate submits documentary proof that —

- (a) such certificate has been obtained from an approved foreign training organisation; and
- (b) he or she has successfully completed the refresher air cargo security training referred to in Subpart 6.
- (2) The application referred to in sub-regulation (1) shall be accompanied by the appropriate fee as prescribed in Part 187.
- (3) The provisions of regulation 108.06. 2 shall apply with the necessary changes to the holder of a certificate referred to in sub-regulation (1).

Register of certificates of approval

108.05.11 (1) The Director shall maintain a register of all approval and accreditation certificates issued in terms of this Part.

- (2) The register of certificates of approval shall contain the following particulars
 - (a) the full name and, if any, the trade name of the holder of the certificate of approval or accreditation;
 - (b) the postal and physical address of the holder of the certificate of approval or accreditation; and
 - (c) the date on which the certificate of approval or accreditation was issued;
- (3) An excerpt of the register shall be furnished by the Director, on payment of the appropriate fee prescribed in Part 187, to any person who shows good and sufficient reason why he or she should be furnished with such extract.

SUBPART 6: TRAINING

Air cargo security familiarisation training

108.06.1 (1) Any –

- (a) air carrier involved in the transportation of cargo;
- (b) person who performs the act of accepting, handling, loading, unloading, transferring, guarding or other processing of cargo, on behalf of an air carrier;
- (c) regulated agent approved by the Director in terms of this Part;
- (d) known consignor accredited by the Director in terms or this Part;

shall ensure that the following categories of personnel in his, her or its employ, or personnel provided by a service provider, successfully complete air cargo security familiarisation training and refresher training every 24 months thereafter:

- (i) personnel involved in acceptance, handling, storage, loading and unloading of cargo and shipping documentation to be transported by air;
- (ii) drivers involved in transporting known cargo to be transported by air;
- (2) The subject matter of initial air cargo security familiarisation training and refresher air cargo security familiarisation training shall be as specified in the syllabi contained in the security manual as prescribed in Document SA-CATS 108.
- (3) Any person referred to in sub-regulation (1) shall complete refresher air cargo security familiarisation training every 24 months, calculated from the date of the successful completion of the air cargo security familiarisation training or the preceding air cargo security familiarisation training, as the case may be.
- (4) Records of such training shall be maintained as stipulated in the Document SA-CATS 108.

Standard air cargo security training

108.06.2 (1) Any –

- (a) air carrier involved in the transportation of cargo;
- (b) person who performs the act of accepting, handling, loading, unloading, transferring or other processing of cargo, on behalf of an operator;
- (c) regulated agent approved by the Director in terms of this Part;
- (d) known consignor accredited by the Director in terms or this Part;

shall ensure that the following categories of personnel in his, her or its employ, or personnel provided by a service provider, have successfully completed standard air cargo security training and refresher training every 24 months thereafter:

- (i) screeners;
- (ii) deputy designated officials; and
- (iii) designated officials.
- (2) Any level of standard cargo security training, referred to in sub-regulation (1) of this regulation shall be conducted by a training organisation designated in terms of Part 141.
- (3) The subject matter of the level of aviation security training shall be as prescribed in Document SA-CATS 108.
- (4) Any person referred to in sub-regulation (1) shall complete refresher standard cargo security training every 24 months.
- (5) Upon the successful completion of the initial aviation security training or the refresher aviation security training referred to in sub-regulation (2), the aviation security training organisation concerned shall issue to the candidate a certificate of competence in standard cargo security training detailing the level of course completed.

PART 109: AVIATION SECURITY TRAINING ORGANISATIONS

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SUBPART 1: GENERAL

Applicability

- 109.01.1 (1) This Part applies to the approval and operation of organisations conducting
 - (a) aviation security training; and
 - (b) aviation security awareness training.
- (2) For purposes of this Part, aviation security training means the training referred to in sub-regulations (1)(a) and (b).

Designation of body or institution

- **109.01.2** (1) The Director may, by notice in the Government Gazette, designate a body or institution to
 - (a) exercise control over the aviation security training specified in the Regulations, and over the persons conducting such training;
 - (b) develop standards for the aviation security training and for the training of such persons as prescribed in Document SA-CATS 109;
 - (c) issue, confirm, suspend or withdraw certificates for the successful completion of the aviation security training, and keep all books or documents regarding such training; and
 - (d) advise the Director on any matter connected with the aviation security training or persons.
- (2) The powers and duties referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 109.

Display of aviation security training organisation approval

109.01.3 The holder of an aviation security training organisation approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval upon request by an authorised officer, inspector or authorised person.

Advertisements

- **109.01.4** Any advertisement by an organisation indicating that it is an aviation security training organisation, shall
 - (a) reflect the number of the aviation security training organisation approval issued by the Director; and
 - (b) contain a reference to the aviation security training for which such approval was issued.

Security inspections and audits

- **109.01.5** (1) An applicant for the issuing of an aviation security training organisation approval shall permit an authorised officer, inspector or authorised person to carry out such security inspections and audits which may be necessary to verify the validity of any application made in terms of regulation 109.02.6.
- (2) The holder of an aviation security training organisation approval shall permit an authorised officer, inspector or authorised person to carry out such security inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Register of approvals

- **109.01.6** (1) The Director shall maintain a register of all aviation security training organisation approvals issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars:
 - (a) full names of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the scope of the approval issued to the holder thereof;
 - (e) the nationality of the holder of the approval; and
 - (f) the principal place of business of the holder of approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF ORGANISATION (AVIATION SECURITY TRAINING)

Requirement for approval

109.02.1 No organisation shall conduct aviation security training except under the authority of, and in accordance with the provisions of, an aviation security training organisation approval issued under this Subpart.

Manual of procedure

- **109.02.2** An applicant for the issuing of an aviation security training organisation approval shall provide the Director with its manual of procedure which shall
 - (a) comply with the requirements prescribed in this Subpart; and
 - (b) contain the information as prescribed in Document SA-CATS 109.

Quality assurance system

- **109.02.3** (1) The applicant shall establish a quality assurance system, to be included in its manual of procedure, for the control and supervision of the aviation security training covered by the application.
- (2) The minimum standards for a quality assurance system are as prescribed in Document SA-CATS 109.

Personnel requirements

109.02.4 (1) The applicant shall engage, employ or contract –

- (a) a senior person to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition, be vested with the following powers and duties in respect of the compliance with such requirements:
 - (i) unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected;
 - (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
 - (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person who is responsible for quality control, and who has direct access to the senior person referred to in paragraph (a) on matters affecting aviation security; and
- (c) adequate personnel to plan conduct and supervise the aviation security training covered by the application.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, conducting or supervising the aviation security training covered by the application.
- (3) The applicant shall have personnel responsible for training or assessing students, who have competence and experience adequate for the level of competence required for such training or assessment.

Accommodation, facilities and equipment

109.02.5 The applicant shall have adequate accommodation, facilities and equipment to enable the personnel to conduct the aviation security training covered by the application.

Application for approval or amendment thereof

109.02.6 An application for the issuing of an aviation security training organisation approval, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) the manual of procedure referred to in regulation 109.02.2; and
 - (iii) copies of training material to be used in such training.

Issuing of approval

- **109.02.7** (1) The Director shall issue an aviation security training organisation approval if
 - (a) the applicant complies with the requirements prescribed in regulations 109.02.2 to 109.02.5:
 - (b) the applicant's senior personnel required by Regulation 109.02.4 have never held a senior position in a security training organisation whose approval to conduct such training was cancelled by the Director.
- (2) The Director shall issue the approval on the appropriate prescribed form .

Scope of approval

109.02.8 An aviation security training organisation approval shall specify the aviation security training which the holder of the approval is entitled to conduct as prescribed in Document SA-CATS 109.

Period of validity

- **109.02.9** (1) An aviation security training organisation approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which has expired or has been cancelled, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.

Transferability

109.02.10 An aviation security training organisation approval is not transferable.

Changes in quality assurance system

- **109.02.11** (1) If the holder of an aviation security training organisation approval desires to make a material change in the quality assurance system referred to in regulation 109.02.3, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 109.02.6 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted if the Director is satisfied, upon submission of appropriate proposed changes to its manual of procedure that the applicant will continue to comply with the provisions of regulation 109.02.2, after the implementation of such approved change.

Renewal of approval

109.02.12 (1) An application for the renewal of an aviation security training organisation approval shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) be accompanied by
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) the manual of procedure referred to in regulation 109.02.2; and
 - (iii) copies of training material to be used in such training.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Duties of holder of approval

109.02.13 The holder of an aviation security training organisation approval shall –

- (a) hold at least one complete and current copy of its manual of procedure referred to in regulation 109.02.2, at each training facility specified in the manual of procedure;
- (b) comply with all procedures detailed in the manual of procedure;
- (c) make each applicable part of the manual of procedure available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in Document SA-CATS 109.

Documents and records

- **109.02.14** (1) The holder of an aviation security training organisation approval shall
 - (a) keep copies of all relevant documents which may be necessary
 - (i) for the specified aviation security training conducted by such holder; and
 - (ii) to determine compliance with the appropriate requirements prescribed in this Subpart; and
 - (b) establish procedures to control the documents referred to in paragraph (a) to ensure that
 - (i) all documents are reviewed and authorised by the appropriate personnel before the issuing thereof;
 - (ii) current issues of all relevant documents are available to those personnel involved in planning, conducting or supervising the specified aviation security training undertaken by the holder of the approval;
 - (iii) all obsolete documents are promptly removed from all points of issue or use; and
 - (iv) changes to documents are reviewed and authorised by the appropriate personnel.
- (2) The holder of the approval shall establish procedures to identify, collect, index, store and maintain all records which may be necessary for the specified aviation security training conducted by such holder and to determine compliance with the appropriate requirements prescribed in this Subpart, and to ensure that
 - (a) a record is kept of each quality control review of the holder of the approval;
 - (b) a record is kept of each person who conducts the specified aviation security training, including particulars of the competence assessments and experience of each such person;
 - (c) a record is kept of each student being trained or assessed by the holder of the approval, including particulars of enrolment, attendance, modules, instructor comments and practical sessions and assessments of each such student;
 - (d) all records are legible; and
 - (e) all records are kept for a period of at least five years calculated from the date of the last entry made in such records.

PART 110: AVIATION SECURITY SCREENER CERTIFICATION

List of regulations

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SUBPART 1: GENERAL

110.01.1 This part applies to the certification of screeners, the functions and limitations of such certification and matters related thereto.

Authority to act as a screener

- **110.01.2** (1) No person shall act as a screener at a South African airport, airline or regulated agent unless such person is the holder of a valid screener certification in terms of this Part.
- (2) No screener shall perform functions other than the functions afforded by the certification held by such screener.
- (3) The holder of a screener certification shall pay the annual currency fees as prescribed in Part 187 applicable to the type of certification on the anniversary date of such certification.

Competency

- **110.01.3** (1) No screener shall perform the functions afforded by a screener certification unless such screener maintains competency by complying with the requirements prescribed in this Part.
- (2) The holder of a screener certification shall submit copies of all documentation reflecting continued maintenance of competency to the Director within 7 days after compliance with the appropriate requirements prescribed in this Part.

Documentation

110.01.4 The Director shall ensure that a screener certification is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Logbooks

- **110.01.5** (1) A screener certified to operate technical screening equipment shall maintain a logbook and shall record therein all the time spent as a screener.
- (2) The form of and information to be contained in a logbook referred to in sub-regulation (1) and the manner in which such logbook has to be maintained, shall be prescribed in Document SA-CATS 110.

Register of certification

- **110.01.6** (1) The Director shall maintain a register of all screener certification issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars
 - (a) full names of the holder of the certification:
 - (b) the physical and postal address of the holder of the certification;
 - (c) the date on which the certification was issued;
 - (d) the nationality of the holder of the certification; and
 - (e) the organisation in which the holder thereof is employed.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the certification is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Language

110.01.7 Screeners shall have sufficient ability in reading, speaking and understanding the English language to enable them to adequately carry out their responsibilities as screeners.

Designation of examiner

110.01.8 (1) The Director may designate an examiner to conduct skills tests and to issue skills test reports.

- (2) The privileges referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 110.
- (3) The Director shall sign and issue to each designated examiner a document which states the full names of such examiner and contain a statement that
 - (a) such examiner has been designated in terms of sub-regulation (1); and
 - (b) such examiner is empowered to perform the functions referred to in sub-regulation (1).
- (4) The application to be considered for designation as referred to in sub-regulation (1) shall be accompanied by
 - (a) detail of the approval or licence to which the application applies; and
 - (b) the appropriate fee as prescribed in Part 187.

SUBPART 2: SCREENER CERTIFICATION

Requirements for screener certification

- **110.02.1** An applicant for the issuing of a screener certification shall
 - (a) be not less than 18 years of age;
 - (b) hold a valid Class 2 medical certificate issued as prescribed in Document SA-CATS 110;
 - (c) have successfully completed the training referred to in regulation 110.02.2;
 - (d) have passed the theoretical knowledge examination referred to in regulation 110.02.3;
 - (e) have undergone the skills test referred to in regulation 110.02.4;
 - (f) have undergone the background checks;
 - (g) have a minimum qualification as prescribed in Document SA-CATS 110.

Training

- **110.02.2** (1) An applicant for the issuing of a screener certification shall have successfully completed the appropriate training as prescribed in Document SA-CATS 110.
- (2) The training contemplated in this Part shall be conducted by the holder of an aviation security training organisation approval issued in terms of Part 109.

Theoretical knowledge examination

- **110.02.3** (1) An applicant for the issuing of a screener certification shall have passed the appropriate theoretical knowledge examination as prescribed in Document SA-CATS 110.
- (2) The applicant who fails a theoretical knowledge examination may apply for retesting after the appropriate period specified in Document SA-CATS 110.

Skills test

- **110.02.4** (1) An applicant for the issuing of a screener certification shall demonstrate to an aviation security designated examiner, the ability to perform as a screener, the procedures as prescribed in Document SA-CATS 110.
- (2) The applicant shall undergo the skill test referred to in sub-regulation (1) within three months of passing the theoretical knowledge examination referred to in regulation 110.02.3.

Application for screener certification

- **110.02.5** An application for the issuing of a screener certification shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) original or certified copy of
 - (aa) the identity document of the applicant; and
 - (bb) the Grade C or equivalent qualification issued by the Private Security Industry Regulatory Authority;
 - (ii) a valid medical certificate issued as prescribed in Document SA-CATS 110;
 - (iii) the original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 110.02.3;
 - (iv) the skills test report as prescribed in Document SA-CATS 110, signed by a designated examiner;
 - (v) the appropriate fee as prescribed in Part 187; and
 - (vi) two recent passport size photographs of the applicant.

Issuing of screener certification

- **110.02.6** (1) The Director shall issue a screener certification if the applicant complies with the requirements referred to in regulation 110.02.1.
- (2) A certification shall be issued on the appropriate prescribed form.
- (3) Upon the issuing of a certification the holder thereof shall forthwith affix his or her signature in ink in the space on the certification provided for such purpose.

Validation of certification issued by appropriate authority

- **110.02.7** (1) The holder of a certification issued by a foreign authority, who desires to act as a screener at a South African airport, airline or regulated agent, shall apply to the Director in the appropriate prescribed form, for a validation of such certification.
- (2) The application for a validation referred to in sub-regulation (1) shall be accompanied by
 - (a) a certified true copy of the certification to which the validation refers;
 - (b) a valid medical certificate, if applicable; and
 - (c) the appropriate fee as prescribed in Part 187.
- (3) Certification issued by an appropriate authority may be validated by the Director
 - (a) subject to the same restrictions which apply to such certification;
 - (b) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 110; and
 - (c) on the appropriate prescribed form .
- (4) The validation issued by the Director is valid for
 - (a) 12 months calculated from the date of issue of such a validation; or
 - (b) the period of validity of the certification issued by the appropriate authority concerned, whichever period is the lesser.
- (5) The holder of a validation issued by the Director may, subject to the provisions of subregulation (6), apply to the Director for the renewal of such validation at least 21 days immediately preceding the date of expiry of such validation.
- (6) The Director may renew a validation of a certification in the circumstances and on conditions as prescribed in Document SA-CATS 110: Provided that a validation of certification, the functions of which are to be performed for commercial purposes, may only be renewed for the same period as referred to in sub-regulation (4).
- (7) The holder of a validation issued by the Director shall comply with the provisions prescribed in this Part and the requirements and conditions as prescribed in Document SA-CATS 110.

Period of validity

- **110.02.8** A screener certification is valid for 5 years, subject to re-validation every 12 months and provided that the holder thereof
 - (a) complies with the requirements of a screener as prescribed in these Regulations;
 - (b) is still employed to perform the functions of screener.

Functions

- **110.02.9** (1) The holder of a valid screener certification shall be entitled to perform screening duties for which the holder received his or her training referred to in Document SA-CATS 110 and which is specified on such certification.
- (2) The functions afforded to the holder of screener certification shall not be exercised by such holder unless he or she
 - (a) is the holder of a valid Class 2 medical certificate issued as prescribed in Document SA-CATS 110; and
 - (b) undergoes the refresher or recurrent training during the year with retesting to occur no less than every 12 months.

PART 111: AVIATION SECURITY

List of regulations

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	programs

General

111.01.1 This Part deals with policy relating to the National Aviation Security Programme as well as matters related thereto.

National Aviation Security Program

- **111.01.2** (1) The Department of Transport shall draw up the National Aviation Security Program, providing for
 - (a) the specific civil aviation security responsibilities of the Department and the Authority in accordance with the Act;
 - (b) the functions to be exercised by the airport management of a designated airport in respect of the establishment and implementation of security measures to prevent the occurrence of acts of unlawful interference;
 - (c) the functions to be exercised by the Air Traffic and Navigation Services Company contemplated in section 2 of the Air Traffic and Navigation Services Company Act, 1993 (Act No. 45 of 1993) in respect of the establishment and implementation of security measures to prevent the occurrence of acts of unlawful interference;

- (d) the responsibility regarding the control of access of airport tenants at designated airports whose concession or facility forms part of the landside or airside boundary or through which access can be gained from landside to airside;
- (e) the specific responsibilities, in the context of aviation security, of the policing authority at designated airports;
- (f) the establishment of an airport security committee for the co-ordination of the development and implementation of security measures and procedures at designated airports;
- (g) the co-operation and communication between States in the development and implementation of aviation security practices and procedures;
- (h) steps to ensure the co-ordination of aviation security measures among government departments, parastatal entities, agencies and other organisations responsible for implementation of the said Program;
- (i) the protection of airports, aircraft and air navigation facilities with specific reference to the designation and protection of restricted areas, access control and the listing of both on- and off-airport navigational and aviation-related facilities which are vital to the continued safe operation of civil aviation;
- (j) the security control of persons boarding an aircraft and items being placed on board aircraft, including
 - (i) screening and searching of the passengers and carry-on baggage;
 - (ii) the control of transit and transfer passengers;
 - (iii) the screening of airline crew, airport staff, permit holders, and other non-passengers;
 - (iv) the provision of special screening procedures;
 - (v) the authorised carriage of weapons;
 - (vi) procedures for the proper control and screening of checked baggage;
 - (vii) control of cargo, courier and express parcels and mail;
 - (viii) procedures to prevent the introduction of weapons, explosives and other dangerous devices into catering supplies intended for carriage on aircraft;
 - (ix) the procurement, calibration, operation, details (including minimum criteria) and maintenance of security equipment;
 - (x) the selection, background check and recruitment criteria for persons charged with the execution of aviation security-related duties;
 - (xi) the background check of persons who in the execution of their duties are required to gain access to restricted areas;
 - (xii) the management of response to acts of unlawful interference;
 - (xiii) measures for the evaluation of the Program;
- (k) a National Civil Aviation Security Quality Control Program, to determine compliance with and validate the effectiveness of the NASP;

- (I) a National Training Program in order to determine that persons applying and monitoring the NASP, are in a position to comply with the laid-down requirements;
- (m) a National Certification Program for the certification of persons carrying out screening operations according to the requirements of the NASP to ensure that performance standards are consistently and reliably achieved;
- (n) the establishment of a centralised security reporting system for analysing security information which shall focus on the following types of reports:
 - (i) Mandatory incident reports: incident reports that are required to be made as a result of the Civil Aviation Regulations with the exception of an accident or serious incident that is reported to the Aviation Safety Investigation Board.
 - (ii) Voluntary reports: reporting of a hazard or incident without any legal or administrative requirement to do so at the reporter's own will and initiative.
 - (iii) Confidential reports: voluntary incident or hazard reports where the reporter's identity is protected by providing a means by which individuals are able to raise issues of concern without being identified to their peer group, management or respective organisations. Confidentiality is achieved by the identification of the reporter's details and following the requirements of the confidential aviation hazard reporting system; and
- (o) any other matter, or international standards that are deemed necessary in the interests of aviation safety and security relating to civil aviation.
- (2) The Department may incorporate directly into the NASP any international aviation standard contained in any Annex and particularly Annex 17.
- (3) The Department shall
 - (a) determine the nature of the training required for persons charged with the execution of the provisions of security programmes and the nature of essential equipment for use at designated airports, ATS providers and by air carriers;
 - (b) prescribe the criteria applicable to the personnel and equipment to be utilised within the aviation security environment.

Airport Security Program

- **111.01.3** (1) A person responsible for the execution of the airport security program appointed by the Minister in terms of section 110 of the Act, shall apply the security program for that airport.
- (2) An airport authority shall draw up a security program (also referred to as a "security plan" in terms of section 155 of the Act,) for the airport concerned providing for
 - (a) the role of and the specific tasks entrusted to airport authority staff, airport security officers, policing authorities, other government agencies (including health,

customs, intelligence and immigration), domestic and foreign airline operators operating flights to and from the airport, tenants, municipal authorities and other authorities involved:

- (b) the establishment and terms of reference of a local airport security committee which shall include all entities engaged in the operation of the airport and which contribute to the establishment and implementation of security measures;
- (c) distribution of reports and summaries on various security aspects of the airport, security information circulars, security surveys, security incidents and screening reports as well as communications to all relevant entities and the media (if deemed necessary in the interests of aviation security);
- (d) description of the airport activities with specific reference to a general description of the airport, a description of the various areas and sectors thereof, its hours of operation, and the activities of organizations operating at or using the airport;
- (e) a description of the security measures applicable to airport security, security control of passengers and hand baggage, security control of hold baggage, cargo, mail and small parcels, certain categories of passengers including VIPs, diplomats, staff members, disabled passengers, inadmissible persons, deportees and escorted passengers, the control of firearms and weapons, the security of aircraft and security equipment and specifications;
- (f) the designation of responsibilities in respect of the approval, procurement, installation, operation and maintenance of security equipment;
- (g) details as to the number, location maintenance, calibration and maintenance of security equipment, including X-ray equipment, explosives detection equipment, hand-held and walk-through metal detectors, simulation chambers, explosive detection dogs and explosive disposal equipment;
- (h) guidelines for the establishment of an appropriate contingency plan in response to acts of unlawful interference including information pertaining to the responsibilities for command control and communications procedures, hostage negotiation procedures, designated aircraft parking locations, incident site access and control, communications equipment guidelines on dealing with the media and the public;
- (i) practical and theoretical training instructions for airport authority and security personnel of an airport, aircraft operators and regulated agents, police, military, customs and immigration personnel, aircraft crew members and other airport personnel; and
- (j) the process to be followed to effect changes to equipment, infrastructure, procedures and contracted security companies.

Air Carrier Security Program

- **111.01.4** (1) An air carrier shall designate a security officer who shall be charged with ensuring compliance with legislation applicable to the security of its operations.
- (2) Every air carrier shall draw up a security program (also referred to as a "security plan" in terms of section 155 of the Act), for flights undertaken as a scheduled public air transport service or undertaken as a scheduled international public air transport service by that air carrier which shall provide for
 - (a) the line of command of the air carrier's executive management for security related functions;
 - (b) the security structure of the air carrier and its charter of duties;
 - (c) receipt and dissemination of and accountability for security information circulars, as well as reports and surveys;
 - (d) the procedures regarding the channels and methods of cdmmunication of information subject to section 107 of the Act;
 - (e) a description of the air carrier's activities together with tehe policy and procedures relating to the security of each activity;
 - (f) the security measures in effect in regard to air carrier security, the security control of passengers, hand baggage, checked baggage, cargo, mail, small parcels courier services, measures relating to certain categories of passengers including VIPs, diplomats, staff members, disabled passengers, inadmissible passengers, deportees and escorted passengers, the carriage of firearms and weapons, the security of aircraft and security equipment; and
 - (g) contingency and emergency plans in respect of acts of unlawful interference including the unlawful seizure of aircraft, sabotage, extortion, bomb threats and interference with staff as well as the training of staff (including security staff) and must be in accordance with the airport security and airport contingency measures;

Air Traffic and Navigation Services Security Program

- **111.01.5** (1) The Air Traffic and Navigation Services Company shall designate a security officer who shall be charged with ensuring compliance with legislation applicable to security at its air navigation facilities.
- (2) The Air Traffic and Navigation Services Company shall draft a security program providing for
 - the protection of ATSUs, communication facilities and radio navigation aids and surveillance facilities by appropriate measures, which may include intrusion detection systems;

- (b) the inspection of control towers, communication facilities and radio navigation aids by relevant maintenance technicians and security staff;
- (c) the procedures for the control of access to Air Traffic and Navigation Services Company facilities;
- (d) the procedures to be followed where unlawful interference of aircraft is known or suspected or in the event where a bomb threat warning has been received; and
- (e) the additional procedures to be followed when a threat is received indicating that a bomb or other explosive device has been placed on board a known aircraft.

General Security Program pertaining to other aviation participants

- **111.01.6** (1) An aviation participant designated by the Minister shall designate a security officer who shall be charged with ensuring compliance with legislation applicable to its activities.
- (2) Other aviation participants as designated by the Minister in terms of section 111(1) (d) of the Act shall draft a security program providing for
 - (a) the compliance with the requirements contained in the National Aviation Security Programme as far as it is applicable; and
 - (b) compliance with the provisions of the airport, air carrier and the Air Traffic and Navigation Services Company security programmes as far as they are applicable.

Review of the National Aviation Security Program and other aviation security programs

- **111.01.7** (1) The Department of Transport shall review the National Aviation Security Program on a regular basis in consultation with the Authority and relevant security agencies.
- (2) The Authority shall review the other aviation security programs referred to in section 111(1) of the Act on a regular basis and submit recommendations for approval to the Minister.

PART 112: AICRAFT PASSENGER IDENTIFICATION

List of regulations

112.00.1	Identification requirements
112.00.2	Verification of personal information
112.00.3	Non-compliance with identification requirements
112.00.4	Powers of authorised person

Identification requirements

- (a) departing as a passenger from an aerodrome in the Republic of South Africa on a scheduled public air transport flight to a destination either within the Republic of South Africa or outside the borders of the Republic of South Africa; or
- (b) arriving passenger at an aerodrome in the Republic of as а South Africa on a scheduled public air transport flight to a destination within the Republic of South Africa or to a destination outside the borders of the Republic of South Africa, is required to produce a valid identification document to the relevant air carrier, at the boarding gates, before boarding the aircraft concerned.

Verification of personal information

- **112.00.2** (1) The details on the personal identification document, including the name, date of birth and gender of the person concerned, must correspond to the details in the air carrier's possession in respect of the intended passenger.
- (2) The name of the person appearing on the identification document or passport must to correspond to the name of the person appearing on the issued boarding pass.
- (3) The air carrier shall confirm that the person checking in baggage is the same person who is to be a passenger on the flight and who has been issued with a boarding pass, or is to be issued with a boarding pass.

Non-compliance with identification requirements

- **112.00.3** (1) A person whose identity cannot be verified in terms of sub-regulations (2) and (3) shall be refused carriage, without recourse to the air carrier concerned, unless some other form of personal identification that is acceptable to the air carrier concerned, is provided.
- (2) A person whose form of personal identification as referred to in subregulation (1), is not acceptable to the air carrier concerned, may be required to undergo additional security screening.

Powers of an authorised person

112.00.4 An authorised person appointed in terms of section 88(1) of the Act is authorised to request a person referred to in sub-regulation (2) for his or her personal identification documentation for verification purposes.

PART 121: AIR TRANSPORT OPERATIONS – CARRIAGE ON AEROPLANES OF MORE THAN 19 PASSENGERS OR CARGO

List or regulations

SUBPART 1: GENERAL

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SUBPART 1: GENERAL

Applicability

121.01.1 (1) This Part applies to –

(a) any South African operator, engaged in a commercial air transport operation, using an aeroplane registered in the Republic of South Africa –

- (i) having a maximum certificated passenger seating capacity of 20 or more as authorized on the initial type certificate issued to such aeroplane;
- (ii) operating in an all-cargo configuration having a maximum certificated take-off mass of greater than 8 618 kg;
- (iii) that is authorized by the Director to be operated under this Part; or
- (iv) that is required by the Director to be operated under this Part, based on the size or complexity of the aeroplane;
- (b) any aircraft that is authorised by the Director to be operated under this Part;
- (c) persons employed, or otherwise engaged by the operator referred to in sub-regulation (1)(a) or (b), who perform functions essential to the operation of aeroplanes operated under this Part; and
- (d) persons, mail or cargo on board an aeroplane operated under this Part.
- (2) For the purposes of this Part, an aeroplane registered in another State and operated by the holder of an operating certificate issued in the Republic of South Africa, shall be deemed to be registered in the Republic.

Admission to flight deck

- **121.01.2** (1) An air operator and the PIC of any aeroplane operated under this Part, shall ensure that no person, other than the flight crew members assigned to a flight, is admitted to, or carried on the flight deck of the aeroplane unless such person is
 - (a) an authorised officer, inspector or authorised person; or
 - (b) permitted by, and carried in accordance with, the instructions contained in the operations manual referred to in regulation 121.04.2.
- (2) Notwithstanding sub-regulation (1), the PIC may, in the interests of safety, deny a person admission to or remove such person from the flight deck. Any decision to deny admission to or remove a person from the flight deck shall be reported to the operator and shall include the reasons for the decision.
- (3) The admission of any person to the flight deck shall not interfere with the operation of the aeroplane.
- (4) The PIC shall ensure that any person carried on the flight deck is made familiar with the applicable safety equipment and pertinent operational procedures.

Passenger intoxication and unruly behaviour

- **121.01.3**(1) An air operator shall not permit a person to enter or be in an aeroplane while under the influence of alcohol or a drug having a narcotic effect, to the extent where the safety of such aeroplane or its occupants is, or is likely to be, endangered.
- (2) The operator shall establish procedures to ensure that any person referred to in sub-regulation (1) is
 - (a) refused embarkation; or
 - (b) if such person is on board, restrained or disembarked.
- (3) Each passenger on board an aeroplane shall obey any command issued by a crew member in the performance of his or her duties.

Compliance with foreign and domestic regulations

- **121.01.4** (1) An air service operator shall ensure all crew members, while operating within foreign airspace, comply with all air traffic rules and regulations of the State concerned and the local airport rules, except where any regulation of this Part is more restrictive and may be followed without violating the rules or regulations of that State.
- (2) The operator shall publish in the operations manual referred to in regulation 121.04.2, such information, procedures and instructions as is necessary to ensure its personnel are familiar with and in compliance with the laws, regulations and procedures pertinent to their duties with respect to
 - (a) flight operations into or within domestic and foreign airspace;
 - (b) the area over which the operation will occur;
 - (c) the aerodromes to be used; and
 - (d) air navigation facilities to be used.
- (3) Notwithstanding sub-regulation (2), each operator, including its employees or agents, shall comply with all applicable provisions of the Regulations.

Regulatory infractions during emergency situations

- **121.01.5** (1) Where the PIC of an aeroplane takes action deemed necessary to ensure the safety of the aeroplane which results in a violation of any regulation of the State in, or over which the aeroplane is being operated, he or she shall comply with the requirements of regulation 91.02.6 and, where possible, cause the event to be marked on the CVR.
- (2) Notwithstanding any requirement to file a report in terms of regulation 91.02.6, the PIC shall submit a full report of the event to the person responsible for operations within 48 hours after the conclusion of the flight in the manner specified in the operations manual referred to regulation 121.04.2.

Language proficiency

- **121.01.6** (1) In addition to the language proficiency requirements specified in Part 61, an air service operator shall not assign a flight crew to duty unless at least one member of the flight crew has demonstrated to such operator, his or her ability to speak and understand the language used for radiotelephony communications over any route and airport named in the OFP for that flight.
- (2) The level of language proficiency required to be demonstrated to the operator shall be as prescribed in Document SA-CATS 121.

SUBPART 2: OPERATIONS PERSONNEL REQUIREMENTS

DIVISION ONE: MINIMUM CREW REQUIREMENTS

Composition of flight crew

- **121.02.1** (1) The minimum number and composition of the flight crew shall not be less than the minimum number and composition specified in the aeroplane flight manual referred to in regulation 121.04.4.
- (2) An air service operator shall allocate additional flight crew members when it is required by the type of operation, and the number of such additional flight crew members shall not be less than the number specified in the operations manual referred to in regulation 121.04.2.
- (3) The operator shall not assign and no person shall act as a flight crew member on an aeroplane type or variant unless the flight crew member meets the qualification requirements specified in regulation 121.02.11.
- (4) The flight crew shall include at least one member who holds a valid radiotelephony operator licence or an equivalent document issued by an appropriate authority, authorising such member to operate the type of radio transmitting equipment to be used.
- (5) The flight crew shall include at least one member who is proficient in navigating over the route to be flown.
- (6) Where the aeroplane flight manual specifies the requirement for the minimum flight crew to include a flight engineer, an operator shall ensure a flight engineer is assigned to each flight who meets the qualifications specified in regulation 121.02.12.
- (7) The operator shall designate for each flight a PIC and a second-in-command.

Crew pairing and in-flight relief of flight crew members

121.02.2 (1) An air service operator shall publish procedures in its operations manual to ensure flight crew members who do not meet the crew pairing standards prescribed in Document SA-CATS-OPS-121 are not simultaneously assigned to flight duty.

- (2) A flight deck crew member may be relieved in flight of his or her flight deck duties by another flight deck crew member qualified in accordance with regulation 121.02.11.
- (3) A flight engineer may be relieved in flight by a flight crew member who is qualified in accordance with regulation 121.02.12 or by a suitably qualified flight crew member acceptable to the Director.
- (4) No operator shall assign and no person shall accept an assignment to provide in-flight relief for the purpose of extending any flight duty period, unless such relief pilot holds the minimum qualifications specified in regulation 121.02.11(1)(f).

Flight and cabin crew member emergency duties

- **121.02.3** (1) An air operator and, where appropriate, the PIC shall assign to each flight and cabin crew member concerned the necessary functions to be performed in an emergency or a situation requiring emergency evacuation and the operator shall establish emergency evacuation procedures based on such assignment.
- (2) The functions referred to in sub-regulation (1) shall be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration the possible incapacitation of individual flight and cabin crew members.
- (3) With respect to the emergency evacuation procedures required by sub-regulation (1)
 - (a) the operator shall prove to the satisfaction of the Director that the procedures to accomplish the evacuation have been adopted and are adequate; and
 - (b) the procedures shall be demonstrated by the operator's flight and cabin crew members and carried out in accordance with the requirements prescribed in Document SA-CATS 121.
- (4) The operator shall carry out the emergency evacuation demonstration referred to in subregulation (3)(b) when a new type or variant of aeroplane or new configuration of an existing aeroplane is introduced for use and has not been certified under a certification process acceptable to the Director, as provided for in Document SA-CATS 121.
- (5) No person may use an aircraft type and model in commercial air transport passengercarrying operations unless the operator has first conducted, for the Authority, an actual fullcapacity emergency evacuation demonstration for the configuration in 90 seconds or less.
- (6) The Director may approve a partial-capacity demonstration in lieu of a full-capacity demonstration where the operator can produce evidence that
 - (a) a satisfactory full-capacity emergency evacuation for the aircraft to be operated was demonstrated during the aircraft type certification or during the certification of another operator; or
 - (b) there is an engineering analysis, which shows that an evacuation is still possible within the 90 second standard, if the operator's aircraft configuration differs with regard to the number of exits or exit type or number of cabin crew members.

- (7) Where the Director has approved the partial evacuation demonstration referred to in sub-regulation (6), such demonstration shall be performed in the manner prescribed in Document SA-CATS 121.
- (8) The emergency evacuation procedures referred to in sub-regulation (1) shall be contained in the operator's operations manual referred to in regulation 121.04.2 and shall form part of the operator's emergency training programme.
- (9) No operator shall assign and no flight or cabin crew member shall perform any emergency function unless such crew member has been trained to perform emergency functions in accordance with the operator's approved emergency training programme.

Cabin crew member complement

- **121.02.4** (1) An air service operator may not operate an aeroplane with a certificated passenger seating capacity of more than 19 in a passenger-carrying service unless
 - (a) one or more cabin crew members have been assigned to duty, if one or more passengers are carried; and
 - (b) the minimum number of cabin crew members assigned to a flight is not less than that prescribed in Document SA-CATS 121, notwithstanding the actual number of passengers on board the aeroplane.
- (2) Where, in consideration of the size, complexity and physical layout of the aeroplane, the Director is of the opinion that it would be in the interest of safety, he or she may, notwithstanding the aeroplane's certificated seating capacity,
 - (a) require one or more cabin crew members licensed in terms of Part 64 to be assigned to duty; or
 - (b) require the operator to demonstrate a capability to provide an equivalent level of safety as would be achieved by paragraph (a).
- (3) A cabin crew member shall give priority to the performance of duties relating to the safety of passengers as may be assigned by the operator or the PIC.
- (4) In unforeseen circumstances, the operator may reduce the required minimum number of cabin crew members: Provided that -
 - (a) the number of passengers has been reduced in accordance with the procedures specified in the operations manual referred to in regulation 121.04.2; and
 - (b) a report is submitted to the Director after completion of the flight.

Operation on more than one type or variant by cabin crew member

- **121.02.5** (1) A cabin crew member shall not operate on more than three aeroplane types except where the Director approves the operation on a fourth aeroplane type: Provided the emergency and safety equipment and procedures for at least two of the aeroplane types are similar.
- (2) The types of aeroplanes which are deemed to be similar in respect of emergency and safety equipment and procedures shall be based on the factors listed in Document SA-CATS 121.

Senior cabin crew member

- **121.02.6** (1) An air service operator shall appoint a senior cabin crew member whenever more than one cabin crew member is carried on board an aeroplane operated under this Part.
- (2) The senior cabin crew member shall be responsible to the PIC for the conduct of cabin operations and the coordination and performance of safety duties.
- (3) The operator shall establish procedures to select the next most suitably qualified cabin crew member to operate as senior cabin crew member in the event of the nominated senior cabin crew member being unable to perform his or her duties.

Cabin crew emergency evacuation stations

121.02.7 A cabin crew member assigned to perform evacuation duties shall occupy the seat provided for that purpose during take-off and landing or when so directed by the PIC for safety purposes.

Seating of cabin crew members during flight

121.02.8 During take-off and landing, and whenever deemed necessary by the PIC in the interests of aviation safety, cabin crew members shall be seated at their assigned stations or seats, on all decks which are occupied by passengers.

DIVISION TWO: FLIGHT CREWMEMBER, CABIN CREW MEMBER AND FLIGHT OPERATIONS OFFICER QUALIFICATIONS

Flight crew member qualifications

- **121.02.9** (1) Subject to sub-regulation (6), an air service operator shall not permit a person to act and no person shall act as the flight crew member of an aeroplane unless, in addition to the recency requirements of regulation 91.02.4, the person
 - (a) holds valid licences, certificates and ratings as required by Part 61 and Part 63 appropriate to the assignment;
 - (b) meets the type and variant training and checking requirements specified in Subpart 3 and has otherwise fulfilled all applicable training requirements set out in technical standard 121.03.4 of Document SA-CATS 121;

- (c) in the case of the PIC assigned to duty on a passenger-carrying flight, meets the area, route and aerodrome familiarisation requirements specified in Document SA-CATS 121;
- (d) in the case of a cruise relief pilot, within the previous 90 days, has
 - (i) operated as a PIC, co-pilot or cruise relief pilot on the same type of aeroplane; or
 - (ii) completed flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a FSTD approved for the purpose, and has practised approach and landing procedures, where the approach and landing procedure practise may be performed as the pilot who is not flying the aeroplane.
- (2) A pilot who does not meet the recency requirements of regulation 91.02.4 or whose training and checking validity periods have lapsed shall regain competency as prescribed in the regaining competency requirements specified in Subpart 3.
- (3) Unless otherwise approved by the Director, an operator shall not assign a person to act and no person shall act as the PIC or second-in-command on more than
 - (a) two different types of aeroplanes, for which a separate licence endorsement is required, under this Part;
 - (b) one type of aeroplane under this Part and an additional two aircraft types of a maximum certificated take-off mass (MCM) in excess of 5 700 kg, for which a separate licence endorsement is required, if operating under Parts 93, 127 or 135; or
 - (c) two different types of aeroplanes for which a separate licence endorsement is required under this Part and an additional different aircraft type of an MCM in excess of 5 700 kg, for which a separate licence endorsement is required, if operating under Parts 93, 127 or 135.
- (4) A pilot operating on more than one type of aeroplane under this Part shall meet the requirements specified in Document SA-CATS 121.
- (5) The operator may permit a person to act and a person may act as the flight crew member of an aeroplane under this Part where the person does not meet the requirements of sub-regulation (1) if
 - (a) the aeroplane is operated on a training, ferry or positioning flight; or
 - (b) the operator
 - (i) is authorised to do so in its operations specifications, and
 - (ii) otherwise complies with the provisions of this Part.

Flight engineer qualifications

121.02.10 An air service operator shall not assign and no person shall act as a flight engineer on board an aeroplane unless the person –

- (a) holds a valid licence, certificates and appropriate ratings issued in terms of Part 63; and
- (b) has fulfilled the requirements of the approved training and checking programme including line induction as specified in Subpart 3.

Cabin crew member qualifications

121.02.11 An air service operator shall not assign a person to act and no person shall act as a cabin crew member on board an aeroplane unless the person –

- (a) holds a valid licence and appropriate ratings issued in terms of Part 64;
- (b) has successfully completed the operator's approved training programme outlined in Subpart 3, except that a person may act as a cabin crew member while undergoing familiarisation training if the person is carried in addition to the number of cabin crew members required by regulation 121.02.5(1) and is under the supervision of a cabin crew member; and
- (c) has successfully completed familiarisation training within 180 days after completing the operator's training programme or has regained qualification in accordance with Subpart 3.

Flight operations officer qualifications

121.02.12 An air service operator shall not permit a person to act and no person shall act as a flight operations officer unless he or she –

- (a) meets the training and checking requirements specified in Subpart 3 and
- (b) holds a flight operations officer certification specifying authorised duty assignments issued by the operator that is acceptable to the Director.

DIVISION THREE: FLIGHT TIME AND DUTY LIMITATIONS

Flight time and duty period scheme

121.02.13 (1) An air service operator shall –

- (a) establish a scheme for the regulation of flight time and duty periods, rest periods and days free of duty as applicable, for each flight crew member, cabin crew member and flight operations officer that –
 - (i) complies with the flight time and duty period limitations, rest periods and days free of duty, prescribed in Document SA-CATS 121; or

- (ii) a system of flight time and duty period limitations, rest periods and days free of duty proposed by the operator where the Director is of the opinion that an equivalent level of safety may be achieved by the operator's proposed scheme; and
- (b) publish the scheme referred to in sub-regulation (1)(a) in the operations manual referred to in regulation 121.04.2.
- (2) The operator shall not assign and no crew member shall accept an assignment if such assignment is not in compliance with the provisions of the scheme referred to in sub-regulation (1)(a) or if -
 - (a) the operator or crew member knows or has been made aware that such flight assignment will cause the crew member to exceed the flight time and duty periods referred to in sub-regulation (1)(a) while on flight duty; or
 - (b) the crew member is suffering from or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue which may endanger the safety of the aeroplane or its crew members and passengers.
- (3) The operator shall not schedule a flight crew member for active flight duty for a period exceeding eight consecutive hours during any given flight time and duty period unless authorised in the scheme referred to in sub-regulation (1)(a).
- (4) Where any flight crew member, cabin crew member or flight operations officer is aware of any reason they would be in violation of the scheme referred to in sub-regulation (1)(a), that person shall, without delay, inform the operator. For the purposes of this regulation, the operator shall be taken to mean
 - (a) the appropriate management personnel if time permits;
 - (b) the duty crew scheduler of the operator; or
 - (c) the duty person responsible for operational control over the flight; and
 - (d) in the case of a cabin crew member, the PIC or such cabin crew member's immediate supervisor.
- (5) The provisions to be included in a flight time and duty scheme referred to in subregulation (1) shall be as prescribed in Document SA-CATS 121.

SUBPART 3: TRAINING AND CHECKING

DIVISION ONE: GENERAL

Air service operator approved training programme

121.03.1 (1) An air service operator shall establish and maintain a training and checking programme for all personnel referenced in Divisions One to Four of this Subpart that will ensure

such personnel are adequately trained and qualified to perform their assigned duties and such personnel shall undergo the training from that operator.

- (2) The training programme referred to in sub-regulation (1) shall be conducted by an ATO approved in accordance with Part 141 or by the operator, if approved by the Director as provided in regulation 121.03.3: Provided that, in the latter case,
 - (a) such programme is conducted for the operator's employees only, and
 - (b) with respect to any licence, rating or validation under Part 61 or 64, the training is restricted to
 - (i) training for an instrument rating revalidation;
 - (ii) initial type rating, familiarisation and differences training; and
 - (iii) training for licence renewals and proficiency checks; or
 - (c) the training is for any other qualification or certification required under this Part.
- (3) The training programme referred to in sub-regulation (1) shall be approved by the Director as provided in regulation 121.03.3.
 - (4) The operator shall ensure that –
 - (a) prior to assignment to duty, each person required to receive training in accordance with this Subpart, shall, whether employed on a full or part time basis, receive such training as appropriate to his or her duties in accordance with the provisions in Document SA-CATS 121;
 - (b) each person required to receive training referred to in paragraph (a), shall pass a
 written examination or other comprehension assessment acceptable to the Director
 and where applicable, complete a skills test as specified in this Subpart; and
 - (c) the training facilities, equipment and personnel are acceptable to the Director and, in the case of training and checking personnel, shall meet the requirements prescribed in Document SA-CATS 121.
- (5) The training and checking programme referred to in sub-regulation (1) shall meet the content prescribed in Document SA-CATS 121.
- (6) The training programme referred to in sub-regulation (1) shall include a system of record keeping as prescribed in regulation 121.04.8.
- (7) The training records referred to in sub-regulation (6) shall be retained as provided in regulation 121.04.8.
- (8) An air operator shall publish the training programme referred to in regulation 121.03.1 in the operations manual referred to in regulation 121.04.2.

Approval of training programme

121.03.2 (1) An air service operator shall submit its ground and flight training programme and any amendments thereto to the Director for approval.

- (2) The interim and formal approval process shall be as prescribed in Document SA-CATS 121.
- (3) The Director may approve an operator to have its training programme either whole or in part contracted to another organisation in accordance with the provisions specified in Document SA-CATS 121.

DIVISION TWO: FLIGHT CREW MEMBER TRAINING

Flight crew member training

121.03.3 (1) Each air service operator shall provide ground and flight training to their flight crew personnel, as applicable, that includes at least the following training components –

- (a) company induction training on an initial basis;
- (b) crew resource management training including human factors, risk analysis and error management training;
- (c) emergency procedures training including
 - the location, inspection schedules, testing as applicable and use of all emergency equipment required to be carried, or otherwise carried on board the aeroplane;
 - (ii) emergency evacuation, and where applicable ditching training; and
 - (iii) training in the functions for which each flight crew member is responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures.
- (d) initial (aeroplane type training) including visual, instrument and special flight procedures as applicable, crew coordination in all types of emergency situations, normal, abnormal, emergency and supplementary procedures for the type of aeroplane assigned to;
- (e) recurrent training;
- (f) upgrade training;
- (g) cruise relief pilot (CRP) training;

- (h) line induction training on initial aeroplane assignment or upgrade;
- (i) differences and familiarisation training where the operator intends to assign a flight crew member to variant types, in accordance with regulation 121.02.12(1)(c);
- (j) pilot qualification to operate in either pilot seat;
- (k) regaining recency/qualification training when required;
- (I) area, route and airport familiarization training;
- (m) ACAS or ACAS II training, as applicable, including ACAS II cyclic training, if applicable, to at least the PIC where the aeroplane is required to be operated with an approved, serviceable ACAS;
- (n) RVSM training as applicable;
- (o) line oriented flight training;
- (p) dangerous goods (DG) training if DG are authorised to be carried or DG awareness training if they are not; and
- (q) any other course of studies required by the Director as prescribed in Document SA-CATS 121 to ensure full competency of personnel on new or special equipment installed in the operator's aeroplane or other operations requiring specialised training.
- (2) Except where noted in Document SA-CATS 121, all training components listed in subregulation (1) shall be provided on an initial and an annual recurrent basis and meet the requirements prescribed in Document SA-CATS 121.

Advanced qualification programme

- **121.03.4** (1) The Director may, upon application by an air service operator, approve the incorporation of an advanced qualification programme (AQP) into the operator's approved training programme: Provided the AQP meets the conditions prescribed in Document SA-CATS 121.
- (2) The AQP shall ensure a level of proficiency is maintained at least to the standards required by Division 5 of this Subpart.

DIVISION THREE: TRAINING OF CABIN CREW MEMBERS

Aeroplane type and differences training

- **121.03.5** (1) A cabin crew member shall complete a type training course when
 - (a) employed by the operator as a cabin crew member; or
 - (b) assigned to act as a cabin crew member on another aeroplane type.

- (2) The operator shall ensure that each cabin crew member successfully completes the initial aeroplane type training as prescribed in Document SA-CATS 121 before undertaking flight operations with the operator.
- (3) A cabin crew member shall complete a differences training course when acting as a cabin crew member
 - (a) in a variant of the current aeroplane type; or
 - (b) in an aeroplane type with equipment, equipment location or safety procedures which differ from the current aeroplane type or variant.

Operator induction training

- **121.03.6** (1) An air operator shall ensure that each cabin crew member has completed the operator induction training, specified in the operations manual referred to in regulation 121.04.2, before undertaking duties assigned to them.
- (2) A cabin crew member shall complete an operator induction training course upon initial hire by the operator.
- (3) The operator induction training courses referred to in sub-regulation (1) shall consist of the subject matter as prescribed in Document SA-CATS 121.

Familiarisation flights

121.03.7 An air operator shall ensure that upon completion of type training, differences training or requalification training, each cabin crew member undertakes familiarisation flights before acting as one of the minimum number of cabin crew prescribed in regulation 121.02.5.

Recurrent training

- **121.03.8** (1) An air operator shall ensure that each cabin crew member undergoes recurrent training, covering the actions assigned to each cabin crew member in evacuation and other appropriate normal and emergency procedures and drills relevant to the aeroplane type or variant in accordance with the requirements as prescribed in Document SA-CATS 121.
- (2) The operator shall ensure that the recurrent training and checking programme syllabus includes theoretical and practical instruction, as well as individual practice. Such syllabus shall be based on those training items from the initial aeroplane type training programme the Director deems necessary.
- (3) Upon successful completion of the recurrent training and checking, the operator shall issue a certificate of competency to the cabin crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.

Regaining qualification training

121.03.9 (1) An air operator shall ensure that a cabin crew member who has not been absent from all flying duties, but has not acted as a cabin crew member on a particular aeroplane type for a period of up to and including six months, completes —

- (a) refresher training as prescribed in Document SA-CATS 121 in such aeroplane type; or
- (b) two familiarisation sectors during commercial operations in such aeroplane type, before undertaking duties on such aeroplane type.
- (2) The operator shall ensure that each cabin crew member who has been absent from all flying duties for more than six months completes the requalification training as prescribed in Document SA-CATS 121.

DIVISION FOUR: TRAINING OF PERSONS OTHER THAN FLIGHT AND CABIN CREW MEMBERS

Employees and service agent training

- **121.03.10** An air service operator shall provide initial, recurrent and refresher training and checking as prescribed in Document SA-CATS 121 for any person whose function is essential to safe operations in terms of this Part. Such training will be given to at least
 - (a) flight operations officers and flight followers;
 - (b) ground service personnel whose function involves working in, on or around the operator's aeroplanes; and
 - (c) any other person deemed necessary by the Director.

DIVISION FIVE: TRAINING, CHECKING, CERTIFICATION AND VALIDITY

Training, checking, certification and validity periods

- **121.03.11** (1) The conduct of any check or demonstration of competency required in terms of this Subpart shall be as prescribed in Document SA-CATS 121.
- (2) The issuance of any certificate or other means of certifying competency shall be as prescribed in Document SA-CATS 121.
- (3) The following training, checking or demonstration of competency validity periods shall apply
 - (a) flight crew members
 - (i) training shall be valid to the first day of the thirteenth month following the month in which the training took place;
 - (ii) except as provided in subparagraph (iv) below, a pilot proficiency check (PPC) is valid to the first day of the seventh month following the month the PPC took place;

- (iii) any two PPCs that are similar in nature and occur within four months of each other shall not alone satisfy the requirements of subparagraph (ii);
- (iv) where an air service operator is approved to conduct an advanced qualification training programme on specific aeroplane types, such approvals allow for the PPC on those types to be valid to the first day of the thirteenth month following the month in which the PPC took place; and
- (v) a line check is valid until the first day of the thirteenth month following the month the line check took place;
- (b) cabin crew members -
 - (i) training shall be valid to the first day of the thirteenth month following the month in which the training took place; and
 - (ii) examinations and competency checks are valid to the first day of the thirteenth month following the month the examination or check took place;
- (c) other than flight or cabin crew members
 - for flight operations officers, training and checks are valid to the first day of the thirteenth month following the month the training or demonstration of competency took place; and
 - (ii) for all others, training and checks are valid to the first day of the twenty-fifth month following the month the training, check or demonstration of competency took place.
- (4) Where any required training, check or demonstration of competency is renewed within the last 60 days of its validity period, its validity period is extended by 6, 12 or 24 months, as appropriate.
- (5) The Director may extend the validity period of any required training, check or demonstration of competency by up to 30 days where the Director is satisfied that the application is justified and that aviation safety is not likely to be compromised: Provided the request for extension is submitted prior to the expiration of the training, check or demonstration of competency.
- (6) Completion of any required training, check or demonstration of competency at any time during the periods specified in paragraphs (3) or (4) above shall be considered as completed in the month due for calculation of the next due date.

SUBPART 4: DOCUMENTATION AND RECORDS

Documentary requirements

- **121.04.1** (1) An air service operator shall ensure that, in addition to the requirements specified in regulation 91.03.1, the following documents or electronic equivalents are carried on board the aeroplane during flight
 - (a) an OFP;
 - (b) the special loads notification (NOTOC), if applicable;
 - (c) the insurance certificate or proof of insurance;
 - (d) a certified copy of the AOC and operations specifications;
 - (e) the load and trim sheet specified in regulation 121.04.9;
 - (f) a copy of the aircraft operating manual or standard operating procedures, as applicable;
 - (g) a copy of the operations manual referred to in regulation 121.04.2 or the portions of it required to be carried; and
 - (h) a copy of the dangerous goods report as specified in regulation 92.00.15, if applicable.
 - (2) The operator shall ensure that –
 - (a) a copy of the OFP;
 - (b) copies of the relevant parts of the flight folio;
 - (c) the load and trim sheet specified in regulation 121.04.9;
 - (d) the passenger list or cargo manifest;
 - (e) the NOTOC, if applicable; and
 - (f) a general declaration in the case of an aeroplane engaged in international flights,

are retained in a safe place at the first point of departure in respect of each flight undertaken by the aeroplane.

(3) Except when otherwise instructed by the Director, the documents referred to in sub-regulation (2) shall be retained at the operator's main base of operations, or other location if approved by the Director, for a period of at least 90 days.

Operations manual

- **121.04.2** (1) An air service operator shall draw up an operations manual containing all information required under this part and setting out the manner in which such operator will operate the air service for which such operator is licensed in terms of the International Air Services Act, 1993 (Act No. 60 of 1993), or the Air Services Licensing Act, 1990 (Act No. 115 of 1990), as the case may be.
 - (2) The operator shall ensure that –
 - (a) all parts of the manual are consistent and compatible in form and content and shall not contravene the conditions contained in the operating certificate or operations specifications issued to the operator in terms of regulation 121.06.3;

- (b) the manual can be readily amended;
- (c) the manual contains an amendment control page and a list of effective pages (LEP) showing the effective date for each page in the manual; and
- (d) the manual has the date of the last amendment to each page specified on that page that agrees with the LEP.
- (3) The operator shall submit the operations manual in the English language in duplicate to the Director for approval.
 - (4) If the Director is satisfied that the operator –
 - (a) will comply with the provisions of regulation 121.06.7; and
 - (b) will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, 1993 or the Air Services Licensing Act, 1990,

the Director shall certify in writing on both copies of the operations manual that such manual has been approved, and shall return one copy of the approved operations manual to the operator.

- (5) The operator shall amend its operations manual –
- (a) where there is a change in any aspect of an operator's operation;
- (b) where the operations manual no longer meets the requirements of these regulations or associated technical standards; or
- (c) when so required by the Director.
- (6) The operator shall submit an amendment to its operations manual in duplicate to the Director for approval and if the Director is satisfied that the operator will comply with the provisions of sub-regulation (4)(a) and (b), the Director shall certify in writing on both copies of the amendment to the approved operations manual that such amendment has been approved and shall return one copy of the approved amendment to the operator.
- (7) The operator shall at all times operate its aeroplanes in accordance with the approved operations manual or an approved amendment thereto.
 - (8) The operator shall –
 - (a) ensure that all operations personnel are able to understand the technical language used and that the information provided will ensure that such personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole;
 - (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight, are easily accessible to the crew members on board during flight time;
 - (c) make the operations manual available for the use and guidance of operations personnel;

- (d) provide the crew members with their own personal copy of the sections of the operations manual which are relevant to the duties assigned to them and designating such crew members as manual holders;
- (e) provide each manual holder with copies of all amendments after approval by the Director and such manual holder shall insert amendments issued to them prior to their next flight assignment; and
- (f) keep the operations manual in a safe place.
- (9) The structure and contents of the operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 121.

Aircraft operating manual

- **121.04.3** (1) An air service operator shall compile an aircraft operating manual (AOM) and make it available during flight time to all flight crew members assigned to the aeroplane and each flight crew member shall operate the aeroplane in accordance with such manual. The operator shall also provide such portions of the AOM to other operator employees or agents where their need to know can be established.
- (2) The AOM shall contain the information specified in Document SA-CATS 121 and shall be submitted to the Director for approval.
 - (3) The operator shall provide each flight crew member with amendments to the AOM.
- (4) The operator may provide the AOM in an electronic format provided a means of accessing the information during flight time has also been made available to any crew member who may have need to access the information therein.
- (5) The aircraft operating manual may be included in the operations manual referred to in regulation 121.04.2 or be published as a stand alone document as part of the manual system.

Aircraft flight manual

- **121.04.4** (1) An air service operator shall maintain and operate its aeroplanes in accordance with the approved AFM required by regulation 91.03.2.
- (2) The operator shall maintain a system that ensures timely receipt and insertion of all AFM revisions as published by the aeroplane manufacturer or as required by the Director.
- (3) Where the operator provides an AOM that meets the requirements of regulation 121.04.3(2) an AFM is not required to be carried on board the aeroplane.

Operational flight plan

- **121.04.5** (1) An air service operator shall ensure that an OFP that meets the requirements specified in Document SA-CATS 121 is completed for each flight undertaken by its aeroplanes.
- (2) The procedures for the use of the OFP and a copy of it shall be contained in the operations manual referred to in regulation 121.04.2.
 - (3) All entries in the OFP shall be current and permanent in nature.

(4) The OFP shall be retained by the operator for a period of at least 90 days.

Flight time and duty period records

121.04.6 (1) An air service operator shall –

- (a) maintain current flight time and duty period records of all crew members and flight operations officers in such operator's employ; and
- (b) retain the flight time and duty period records for a period of 15 calendar months calculated from the date of the last flight of each crew member or, for flight operations officers, from their last date of employment.
- (2) (a) A crew member who is employed by more than one operator or otherwise accumulates flight time outside of his or her employment, shall maintain an accurate record of flight time and duty periods and shall provide copies thereof to all operators by whom such crew member is employed.
- (b) While the crew member is responsible to report all flight activity, each employer maintains responsibility to ensure the crew member concerned does not exceed the limits prescribed in the flight time and duty scheme of the operator referred to in regulation 121.02.13.

Records of emergency and survival equipment

- **121.04.7** (1) An air service operator shall compile a list of all the survival and emergency equipment to be carried in the aeroplane and shall have such list available at all times for immediate communication to rescue coordination centres.
- (2) The survival and emergency equipment list shall be included in the operations manual referred to in regulation 121.04.2.
- (3) The format and minimum information to be included in the survival and emergency equipment list shall be as prescribed in Document SA-CATS 121.

Training records

- **121.04.8** (1) An air service operator shall establish a training file for each person required to receive training and retain on such file a record of all training and checking required in terms of Subpart 3. The records of training and checking shall contain at least the information prescribed and be retained for the period of time specified in Document SA-CATS 121.
- (2) The operator shall establish procedures to make an employee's training file available for supervised review by such employee, but all training files shall remain in the custody of the operator.

Load and trim sheet

121.04.9 (1) An air service operator –

- (a) registered in the Republic and operated into, within or from the Republic under
 - (i) a Class I or Class II licence issued in terms of the Air Services Licensing Act, 1990; or

- (ii) a Class I or Class II licence issued in terms of the International Air Services Act; or
- (b) registered in a foreign State and operated into, within or from the Republic under a foreign operator's permit issued in terms of the International Air Services Act;

shall ensure that no flight is undertaken by the aeroplane unless the person superintending the loading of such aeroplane has completed and certified a load and trim sheet.

- (2) A load and trim sheet shall be completed in duplicate and one copy shall be carried in the aeroplane and one copy shall be retained in accordance with the provisions of regulation 121.04.1.
- (3) The load and trim sheet shall be retained by the operator for a period of at least 90 days calculated from the date on which the flight was completed.
- (4) The minimum contents of a load and trim sheet shall be as prescribed in Document SA-CATS 121.

Aeroplane search procedure checklist

121.04.10 An air service operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aeroplane may be the object of an act of unlawful interference. The checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aeroplane.

Preservation of documents

121.04.11 An air service operator shall retain any document required in terms of Subpart 4 for the period of time specified herein even where, prior to the expiry of such retention period, the operator ceases to maintain ownership or possession of the aeroplane concerned.

Cosmic radiation records

121.04.12 An air service operator shall, for each flight of an aeroplane above 49 000 ft, maintain records so that the total cosmic radiation dose received by each crew member over a period of 12 consecutive months can be determined.

SUBPART 5: AEROPLANE INSTRUMENTS AND EQUIPMENT

Approval of instruments and equipment

- **121.05.1** (1) For the purposes of this Subpart, any reference to the initial date of a type certificate (TC) or certificate of airworthiness (C of A) means the first time that TC or C of A was issued for that aircraft type.
- (2) An air service operator shall ensure that a flight does not commence unless the instruments and equipment required under this Subpart, or otherwise installed on the aeroplane

are such that will enable the flight crew to control the flight path of the aeroplane, carry out any required procedural manoeuvres and observe the operating limitations of the aeroplane in the expected operating conditions and are —

- (a) subject to the provisions of sub-regulation (2), approved and installed in accordance with the requirements, including operational and airworthiness requirements, applicable to such instruments and equipment; and
- (b) in a condition for safe operation of the kind being conducted, except as provided for in the MEL.
- (3) The operator shall not be required to obtain approval for the –
- (a) fuses referred to in regulation 91.04.2;
- (b) intrinsically safe electric torches referred to in regulation 91.04.3(1)(d);
- (c) accurate time piece referred to in regulations 91.04.4 and 91.04.5;
- (d) first aid equipment referred to in regulation 91.04.16;
- (e) megaphones referred to in regulation 91.04.24;
- (f) survival equipment referred to in regulation 91.04.29; and
- (g) medical equipment referred to in regulation 121.05.13.

Flight, navigation and associated equipment for aeroplanes operated under VFR

121.05.2 (1) An air service operator shall not operate an aeroplane in accordance with VFR, unless such aeroplane is equipped with –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes and seconds;
- (c) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
- (e) a vertical-speed indicator;
- (f) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
- (g) an attitude indicator;
- (h) a stabilised direction indicator; and
- (i) a means of indicating on the flight deck the outside air temperature in degrees Celsius.
- (2) The second pilot's station shall be equipped with –
- (a) a sensitive pressure altimeter with a subscale setting calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;

- (b) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
- (c) a vertical-speed indicator;
- (d) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
- (e) an attitude indicator; and
- (f) a stabilised direction indicator.
- (3) For flights, the duration of which does not exceed 60 minutes, which commence and end at the same aerodrome, and which remain within 25 nautical miles of such aerodrome, the instruments specified in sub-regulation (1)(f), (g) and (h), and sub-regulation (2)(d), (e) and (f), may be replaced by a turn-and-slip indicator, or a turn coordinator incorporating a slip indicator, or both an attitude indicator and a slip indicator.
- (4) A large commercial air transport aeroplane being operated by night shall be equipped in accordance with the flight and navigation instruments referred to in regulation 121.05.3.

Flight, navigation and associated equipment for aeroplanes operated under IFR

- **121.05.3** (1) An air service operator shall not operate an aeroplane in accordance with IFR, unless such aeroplane is equipped with
 - (a) a magnetic compass;
 - (b) an accurate time-piece showing the time in hours, minutes and seconds;
 - (c) two sensitive pressure altimeters with subscale settings, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing, including a warning indicator of pitot heater failure;
 - (e) a vertical-speed indicator;
 - (f) a turn-and-slip indicator or a turn co-ordinator, incorporating a slip indicator;
 - (g) an attitude indicator;
 - (h) a stabilised direction indicator;
 - (i) a means of indicating on the flight deck the outside air temperature in degrees Celsius;
 - (j) an alternate source of static pressure for the altimeter and the airspeed and verticalspeed indicators;
 - (k) a chart holder in an easily readable position which can be illuminated, if to be operated at night;
 - (I) a means of indicating whether the power supply to the gyroscopic instrument is adequate;

- (m) in the case of a multi-engine aeroplane, at least two independent electrical generating systems each operated by separate engines and individually capable of powering_all required instruments and equipment necessary for safe emergency operation of the aeroplane; and
- (n) in the case of the pressure altitude reporting transponder specified in regulation 91.04.5(1)(I),
 - (i) all aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2009 shall be equipped with a data source that provides pressure-altitude information with a resolution of 25 ft or better; and
 - (ii) within six months from the date of commencement of these Regulations, all aeroplanes shall be equipped with a data source that provides pressure-altitude information with a resolution of 25 ft or better.
- (2) The second-in-command's station shall be equipped with –
- (a) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight, which may be one of the two altimeters required under sub-regulation (1)(c);
- (b) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunction due to either condensation or icing;
- (c) a vertical-speed indicator;
- (d) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
- (e) an altitude indicator; and
- (f) a stabilised direction indicator.
- (3) In addition to the flight and navigation equipment referred to in sub-regulations (1) and (2), an aeroplane shall be equipped with a single standby attitude indicator, capable of being used from either pilot's station which
 - (a) is powered continuously during normal operation and, after a total failure of the normal electrical generating system is powered from a source independent of the normal electrical generating system;
 - (b) provides reliable operation for a minimum of 30 minutes after total failure of the normal electrical generating system, taking into account other loads on the emergency power supply and operational procedures;
 - (c) operates independently of any other attitude indicating system;
 - (d) is operative automatically after total failure of the normal electrical generating system and provides a clear indication on the instrument panel that the attitude indicator(s) is or are being operated by emergency power; and
 - (e) is appropriately illuminated during all phases of operation,

Provided that if the standby attitude instrument system is capable of being used through flight attitudes of 360° of pitch and roll, the turn-and-slip indicators may be replaced by slip indicators.

- (4) Where the standby attitude indicator referred to in sub-regulation (3) has its own dedicated power supply, there shall be an associated indicator, either on the instrument or instrument panel, when such power supply is in use.
- (5) Instruments that are used by any pilot shall be so arranged as to permit the pilot to see their indications readily from his or her station with the minimum practicable deviation from the position and line of vision normally assumed when looking forward along the flight path.

Altitude alerting system

- **121.05.4** The operator of a large turbine-engine aeroplane shall not operate the aeroplane unless such aeroplane is equipped with an altitude alerting system capable of
 - (a) alerting the flight deck crew members upon approaching preselected altitude in either ascent or descent in sufficient time to establish level flight at such preselected altitude; and
 - (b) alerting the flight deck crew members when deviating above or below a preselected altitude by at least an aural signal.

Terrain awareness and warning system

- **121.05.5** (1) All turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg or authorised to carry more than 30 passengers, for which the individual certificate of airworthiness is first issued on or after 1 July 1979, shall be equipped with a TAWS.
- (2) All turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorised to carry more than nine passengers, for which the individual certificate of airworthiness is first issued on or after 1 January 2010, shall be equipped with a TAWS which has a predictive terrain avoidance function.
- (3) All turbine-engine aeroplanes authorised under this Part to carry passengers shall be equipped with a TAWS which has a predictive terrain avoidance function.
- (4) As from 1 January 2013 all piston-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorised to carry more than nine passengers shall be equipped with a TAWS which provides the warnings contemplated in sub-regulations (6)(a) and (c), warning of unsafe terrain clearance and a predictive terrain avoidance function.
- (5) A TAWS shall automatically provide a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.
- (6) A TAWS shall provide, unless otherwise specified herein, warnings of the following circumstances
 - (a) excessive descent rate;
 - (b) excessive terrain closure rate;

- (c) excessive altitude loss after take-off or go-around;
- (d) unsafe terrain clearance while not in landing configuration;
 - (i) gear not locked down; or
 - (ii) flaps not in a landing position; and
- (e) excessive descent below the instrument glide path.
- (7) No person shall inhibit or otherwise render inoperative any required TAWS during flight time except in accordance with the approved aeroplane flight manual.

Airborne weather radar equipment

- **121.05.6** (1) Subject to the provisions of sub-regulation (2), an air service operator shall not operate the aeroplane whenever such aeroplane is being operated by night or in IMC in area where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radars, may be expected to exist along the route unless such aeroplane is equipped with airborne weather radar equipment.
- (2) In the case of a non-pressurized aeroplane, the airborne weather radar equipment may however be substituted by other approved equipment, which is capable of detecting thunderstorms and other potentially hazardous weather conditions, and of providing the flight crew with bearing and distance of such detected conditions.

Cosmic radiation detection equipment

121.05.7 An air service operator of an aeroplane which is intended to be operated above 49 000 feet, shall ensure that the aeroplane is equipped with an instrument to measure and indicate continuously the dose rate of total cosmic radiation being received and the cumulative dose on each flight.

Flight deck crew interphone system

121.05.8 An air service operator shall not operate the aeroplane unless such aeroplane is equipped with a flight deck crew interphone system, including headsets and microphones, not of a hand-held type, for use by all flight deck crew members.

Flight crew interphone system

- **121.05.9** (1) An air service operator shall not operate an aeroplane with a MCM exceeding 15 000 kilograms and a maximum approved passenger seating configuration of more than 19 seats, unless such aeroplane is equipped with a flight crew interphone system.
 - (2) The flight crew interphone system shall –
 - (a) operate independently of the public address system except for handsets, microphones, selector switches and signalling devices;
 - (b) provide a means of two-way communication between the flight deck crew compartment and –

- (i) each passenger compartment;
- (ii) each galley located on another level than on a passenger deck level; and
- (iii) each isolated flight crew compartment;
- (c) be readily accessible for use from each of the required flight deck crew stations on the flight deck;
- (d) be readily accessible for use at the required cabin crew member stations close to each separate or pair of floor-level emergency exits;
- (e) have an alerting system incorporating aural or visual signals for use by flight deck crew members to alert the cabin crew and for use by cabin crew members to alert the flight deck crew;
- (f) have a means of the recipient of a call to determine whether it is a normal call or an emergency call; and
- (g) provide on the ground a means of two-way communication between ground personnel and at least two flight deck crew members.

Public address system

- **121.05.10** (1) The operator of aeroplane with a maximum approved passenger seating configuration of more than 19 seats, shall not operate the aeroplane unless such aeroplane is equipped with a public address system.
 - (2) The public address system shall –
 - (a) operate independently of the interphone systems referred to in regulations 121.05.8 and 121.05.9, except for handsets, microphones, selector switches and signalling devices;
 - (b) be readily accessible for immediate use from each required flight deck crew member station:
 - (c) be readily accessible for use from at least one cabin crew member station in the cabin;
 - (d) in the case of a public address system microphone intended for cabin crew member use, be positioned adjacent to a cabin crew member seat located near each required floor-level emergency exit in the passenger compartment;
 - (e) be capable of operation within 10 seconds by a cabin crew member at each of those stations in the compartment from which the use of such public address system is accessible:
 - (f) be audible and intelligible in all phases of flight at all passenger seats, toilets and cabin crew member seats and stations; and
 - (g) be powered continuously during normal operation.

Windshield wipers

121.05.11 An air service operator shall not operate an aeroplane unless such aeroplane is equipped with a windshield wiper or equivalent system for each required pilot station.

Internal doors and curtains

- **121.05.12** An air service operator shall not operate an aeroplane unless such aeroplane is equipped with
 - (a) in the case of an aeroplane with a maximum certified passenger seating configuration of more than 19 seats, a door between the passenger compartments and the flight deck compartment with a locking device to prevent passengers from opening it without the permission of a flight deck crew member;
 - (b) a device for opening each door which separates a passenger compartment from another compartment that has emergency exit provisions and such device for opening shall be readily accessible;
 - (c) if it is necessary to pass through a doorway or curtain separating the passenger cabin from other areas to reach any required emergency exit from each passenger seat, a device to secure such door or curtain in the open position;
 - (d) a placard on each internal door or adjacent to a curtain which provides access to an emergency exit, to indicate that the door or curtain shall be secured open during take-off and landing; and
 - (e) a device for any flight crew member to unlock any door which is normally accessible to passengers and which can be locked by passengers.

First aid, emergency medical and universal precaution kits

- **121.05.13** (1) No air service operator shall operate an aircraft unless such aircraft is equipped with an appropriate first aid kit as prescribed in Document SA-CATS 121 that is accessible to the crew or passengers.
- (2) The operator of an aeroplane with a maximum approved passenger seating configuration of more than 10 seats, shall not operate the aeroplane unless such aeroplane is equipped with the appropriate emergency medical kit as prescribed in Document SA-CATS 121, if any point on the planned route is more than 120 minutes flying time, at normal cruising speed, from an aerodrome at which qualified medical assistance is available.
- (3) The medication contained in the emergency medical kit shall only be dispensed by a qualified doctor, nurse or similarly qualified personnel acting under the authority of the PIC of the aeroplane.
- (4) The emergency medical kit shall be dust and moisture proof and shall be carried in an appropriate secured location.
- (5) Personnel authorised by the operator shall carry out periodical inspections of all emergency medical kits to ensure that, as far as is practicable, the contents thereof are in a condition necessary for their intended use.
- (6) The supplies in the emergency medical kit shall be replenished at regular intervals in accordance with instructions contained on their labels or as circumstances require.
- (7) The operator of an aircraft shall ensure the universal precaution kits prescribed in Document SA-CATS 121 are carried.

Means for emergency evacuation

121.05.14 (1) An air operator shall not operate any aeroplane with passenger emergency exit sill heights –

- (a) which are more than 1,83 metres above the ground with the aeroplane on the ground and the landing gear extended; or
- (b) which will be more than 1,83 metres above the ground after the collapse of, or failure to extend one or more legs of the landing gear and for which a type certificate was first applied for on or after 1 March 1998,

unless such aeroplane has equipment or devices available at each exit to enable passengers and flight crew members to reach the ground safely in an emergency.

- (2) The equipment or devices referred to in sub-regulation (1) need not be provided at overwing exits if the designated place on the aeroplane structure at which the escape route terminates, is less than 1,83 metres from the ground with the aeroplane on the ground, the landing gear extended and the flaps in the take-off or landing position, whichever flap position is higher from the ground.
- (3) In an aeroplane required to have a separate emergency exit for the flight deck crew and
 - (a) for which the lowest point of the emergency exit is more than 1,83 metres above the ground with the landing gear extended; or
 - (b) for which a type certificate was first applied for on or after 1 March 1998 and for which the lowest point of the emergency exit will be more than 1,83 metres above the ground after the collapse of, or failure to extend one or more legs of the landing gear;

there shall be a device to assist the flight deck crew members in reaching the ground safely in an emergency.

Airborne Collision Avoidance System

121.05.15 (1) No air service operator or PIC of a turbine-engine aeroplane shall operate an aeroplane unless –

- (a) such aeroplane is equipped with a serviceable ACAS meeting ACAS II specifications, as prescribed in technical standard 91.04.31 of Document SA-CATS 91; and
- (b) the flight crew members have been trained and checked as prescribed in technical standard 121.03.4 of Document SA-CATS 121.
- (2) Notwithstanding the provisions of sub-regulation (1), an aeroplane may be flown –
- (a) for the purpose of moving the aeroplane to a place to have an approved but unserviceable ACAS that is fitted to the aeroplane repaired, removed, substituted or overhauled; or
- (b) if the aeroplane is fitted with an approved ACAS that is unserviceable at the beginning of the flight –

- (i) for aeroplanes with an approved MEL, such aeroplane is operated in accordance with that MEL; or
- (ii) for aeroplanes without an approved MEL
 - (aa) if not more than 10 days have passed since the ACAS became unserviceable, excluding the day of discovery, or for such shorter duration as prescribed by the authority responsible for a particular airspace; or
 - (bb) if the TA and RA are inoperative on the non-flying pilot side, the TA and RA elements and audio functions are operative on the flying pilot side, and on intercontinental flights the TA and RA functions are visible to the non-flying pilot.
- (3) The PIC of an aeroplane that is fitted with a serviceable ACAS system shall take all reasonable steps to ensure that the system is activated at all times during flight, and that its use is consistent with the conditions prescribed for the area of operation.

Passenger cabin signs and placards

- **121.05.16** An air service operator shall ensure the following information is conveyed to the passengers by means of signs or placards suitably conspicuous that will ensure each passenger on board the aeroplane is aware
 - (a) of when and how seat belts must be fastened;
 - (b) of when and how oxygen equipment is to be used if the carriage of oxygen is required;
 - (c) that smoking is not permitted;
 - (d) of the location and use of life jackets or equivalent individual flotation devices where their carriage is required; and
 - (e) of the location and method of opening emergency exits.

Flight recorders

- **121.05.17** (1) An air service operator shall equip the aeroplanes specified in Document SACATS 121 with the flight recorders as provided therein.
- (2) Each flight recorder installed in an aeroplane shall be located and installed in such a manner that maximum practicable protection is provided, in order that, in the event of an accident or incident, the recorded data may be recovered in a preserved and intelligible state. Flight recorders shall meet the crashworthiness and fire protection specifications prescribed in Document SA-CATS 121.
- (3) Flight recorders shall be deactivated upon completion of flight time following an accident or incident. The flight recorders shall not be reactivated before their disposition to the accident or incident investigation team.
- (4) An operator shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records and, if

necessary, the associated flight recorders and their retention in safe custody pending their disposition as determined in accordance with Part 12.

- (5) The flight recorder shall not be switched off during flight time.
- (6) Flight recorders shall be checked daily and on an annual basis as specified in Document SA-CATS 121.

Flight data recorders

- **121.05.18** (1) An air service operator shall ensure any aeroplane operated is equipped with the FDR specified in technical standard 121.05.17 of Document SA-CATS 121.
- (2) The operator shall ensure that the FDR required by this Subpart complies with the specifications as prescribed in technical standard 121.05.17 of Document SA-CATS 121.
- (3) Each FDR installed in an aeroplane shall be located in such a manner that ensures maximum practicable protection is provided, in order that, in the event of an accident or incident, the recorded data may be recovered in a preserved and intelligible state.
- (4) The parameters of the FDR shall be determined to be within the ranges, accuracies and recording intervals as prescribed in technical standard 121.05.17 of Document SA-CATS 121 and, where required by sub-regulation (1), shall comply with the requirements of
 - (a) a Type I/IA FDR capable of recording the parameters that accurately determine the aeroplane flight path, speed, attitude, engine power, configuration and operation; or
 - (b) a Type II/IIA FDR capable of recording the parameters that accurately determine the aeroplane flight path, speed, attitude, engine power and configuration of lift and drag devices.
 - (5) No operator may operate an aeroplane equipped with a FDR using –
 - (a) metal foil;
 - (b) photographic film technology; or
 - (c) from 1 January 2016, magnetic tape.
- (6) The FDR required by sub-regulation (1) shall be capable of retaining the data recorded during at least the last 25 hours of its operation except for the Type IIA FDR, which shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.
- (7) The data obtained from a FDR shall be obtained from aeroplane sources which enable accurate correlation with information displayed to the flight crew.
- (8) The FDR shall start automatically to record the data prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is incapable of moving under its own power.
 - (9) An aeroplane may commence a flight with the FDR inoperative: Provided that –
 - (a) for aeroplanes with an approved MEL, the aeroplane is operated in accordance with that MEL and such MEL incorporates the provisions of paragraph (b) below; or

- (b) for aeroplanes without an approved MEL
 - (i) the aeroplane shall not depart from an aerodrome where repairs or replacements to such FDR can be made;
 - (ii) the aeroplane does not exceed six further consecutive flights with the FDR unserviceable;
 - (iii) not more than 48 hours have elapsed since the FDR became unserviceable; and
 - (iv) such FDR is not a CVR combined with the FDR and the CVR is serviceable and functioning in accordance with the requirements of regulation 121.05.18.

Cockpit voice recorders

- **121.05.19** (1) An air service operator shall ensure each aeroplane operated under this Part is equipped with a CVR as specified in technical standard 121.05.17 of Document SA-CATS 121.
- (2) The operator shall ensure that the CVR required by this Subpart complies with the specifications as prescribed in technical standard 121.05.17 of Document SA-CATS 121.
 - (3) The CVR shall record, with reference to a time scale –
 - (a) voice communications transmitted from or received on the flight deck or in the cockpit by radio;
 - (b) the aural environment of the flight deck or cockpit, including without interruption, the audio signals received from each microphone in use;
 - (c) voice communications of flight crew members on the flight deck or in the cockpit using the interphone system of the aeroplane, if installed;
 - (d) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker; and
 - (e) voice communications of flight crew members on the flight deck or crew members in the cockpit using the public address system of the aeroplane, if installed.
 - (4) The CVR shall -
 - (a) be capable of retaining information recorded during at least the period of time as prescribed in technical standard 121.05.17 of Document SA-CATS 121;
 - (b) start automatically to record the aeroplane moving under its own power and continue to record, until the termination of the flight when the aeroplane is no longer capable of moving under its own power; and
 - (c) if possible, start to record the cockpit checks prior to engine start at the beginning of the flight, until the cockpit checks immediately following engine shutdown at the end of the flight.
 - (5) The CVR may be combined with a FDR referred to in regulation 121.05.18.
- (6) From 1 January 2016, no operator may operate an aeroplane equipped with a CVR using magnetic tape or wire.

- (7) An aeroplane may commence a flight with the CVR inoperative: Provided that –
- (a) for aeroplanes with an approved MEL, such aeroplane is operated in accordance with that MEL and such MEL incorporates the provisions of paragraph (b) below; or
- (b) for aeroplanes without an approved MEL
 - (i) the aeroplane shall not take-off from an aerodrome where repairs or replacements to such CVR can be made;
 - (ii) the aeroplane does not exceed six further consecutive flights with the CVR unserviceable;
 - (iii) not more than 48 hours have elapsed since the CVR became unserviceable; and
 - (iv) any FDR required to be carried is operative, unless the FDR is combined with a CVR.

Data link recorders

- **121.05.20** (1) All aeroplanes for which the individual certificate of airworthiness was first issued after 1 January 2016, which utilise any of the data link communications applications listed in Document SA-CATS 121 and are required to carry a CVR shall record on a flight recorder, all data link communications messages.
- (2) All aeroplanes which are modified on or after 1 January 2016 to install and utilise any of the data link communications applications listed in Document SA-CATS 121 and are required to carry a CVR shall record on a flight recorder the data link communications messages.
- (3) Sufficient information to derive the content of the data link communications message and, whenever practical, the time the message was displayed to or generated by the crew, shall be recorded.

Lifesaving equipment during flight over open water

- **121.05.21** (1) No air service operator shall operate an aeroplane over water at a distance of more than 50 nm from shore, in any operation described in sub-regulation (2) unless there is carried on board one life jacket or equivalent individual flotation device for each person on board, stowed in a position easily accessible from each seat or berth occupied by such person.
 - (2) The equipment prescribed in sub-regulation (1) applies to –
 - (a) aeroplanes having two power-units, where in the event of the critical power-unit becoming inoperative at the most critical point along the route, the aeroplane is not capable of maintaining the minimum safe flight altitude to the planned destination or a suitable alternate aerodrome where a safe landing can be made;
 - (b) aeroplanes having three or more power-units, where in the event of two power-units becoming inoperative at the most critical point along the route, the aeroplane is not capable of maintaining the minimum safe flight altitude to the planned destination or a suitable alternate aerodrome where a safe landing can be made;

(c) when taking off or landing at an aerodrome where the aeroplane flight path is over water and in the opinion of the Director, should any mishap occur, there would be a likelihood of the aeroplane ditching into the water.

Equipment requirements for aeroplanes on long range over-water flights

121.05.22 (1) In addition to the equipment prescribed in regulation 121.05.21(1), the following equipment shall be installed in all aeroplanes when used over routes on which the aeroplane may be over water and at more than a distance corresponding to 120 minutes at cruising speed or 400 nm, whichever is the lesser, away from land suitable for making an emergency landing:

- (a) Life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in an emergency, provided with such life-saving equipment, including means of sustaining life as is appropriate to the flight to be undertaken; and
- (b) Equipment for making distress signals.
- (2) Each life jacket and equivalent individual flotation device, except that provided for an aeroplane specified in regulation 121.05.21(2)(d), shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.
- (3) The life raft, survival radio equipment and information requirements for such extended over-water flights shall be as prescribed in technical standard 91.04.28 of Document SA-CATS 91.

Cabin attendant seats

121.05.23 Aeroplanes shall be equipped with seats for cabin crew members which shall be forward or rearward facing, within 15° of the longitudinal axis of the aeroplane and located near floor-level emergency exits, where possible. Each cabin crew member required to satisfy the emergency evacuation criteria shall have a seat equipped with a safety harness: Provided that a safety belt with one diagonal shoulder strap is permitted if the fitting of a safety harness is not reasonably practical.

Emergency locator transmitters

121.05.24 (1) No air service operator shall operate an aeroplane under this Part unless such aeroplane is equipped with –

- (a) at least one automatic ELT or two ELTs of any type; and
- (b) where the aeroplane is of a type for which the individual certificate of airworthiness was first issued after 1 July 2008, it shall be equipped with at least two ELTs, one of which shall be automatic.
- (2) ELT equipment carried in terms of sub-regulation (1) shall operate and be installed as prescribed in technical standard 91.04.26 of SA-CATS 91.

- (3) ELTs required to be fitted in terms of this regulation, shall be capable of transmitting on the frequencies 121,5 MHz and 406 MHz simultaneously.
- (4) Notwithstanding sub-regulations (1) and (2), an aeroplane may be operated without a serviceable ELT where
 - (a) it is operated in accordance with a MEL approved by the Director; or
 - (b) where a MEL has not been approved by the Director in respect of the aeroplane, the operator
 - (i) repairs or removes the ELT at the first aerodrome at which repairs or removal can be accomplished;
 - (ii) on removal of the ELT from the aeroplane, sends the ELT to a maintenance facility;
 - (iii) displays on a readily visible placard within the aeroplane cockpit, for the period of removal of the ELT from the aeroplane, a notice stating that the ELT has been removed and setting out the date of removal; and
 - (iv) installs a serviceable ELT within 5 days after the date of removal.

Microphones

121.05.25 All flight crew members required to be on flight deck duty shall communicate through boom or throat microphones below the transition level/altitude.

SUBPART 6: AIR OPERATOR CERTIFICATE

Requirement to hold AOC

- **121.06.1** No air service operator shall operate an aeroplane in terms of this Part unless the operator is the holder of and complies with the conditions of a valid AOC including the operations specifications attached thereto and an air services licence issued in terms of the Air Services Licensing Act, No. 115 of 1990, or the International Air Services Act, No. 60 of 1993.
- (2) The holder of an AOC shall not wet lease in more than fifty percent of its entire fleet nor more than fifty percent of the aeroplane type in the fleet having the greatest MCM.
- (3) The operations specifications of an AOC shall contain a record of at least the type, model or series, and registration of each aeroplane approved for use by an operator.

Application for the issuance or amendment of AOC and operations specifications

121.06.2 (1) An application for the issuance or amendment of an AOC or operations specifications shall be made to the Director in the form and manner prescribed in Document SACATS 121 and shall be accompanied by the appropriate fee prescribed in Part 187.

- (2) The applicant shall demonstrate in the application that the applicant –
- (a) has adequate equipment, facilities and personnel to operate the proposed commercial air transport operation; and
- (b) is able to conduct the commercial air transport service in a safe and proper manner and in full compliance with all applicable rules and regulations.
- (3) The holder of an AOC may add to its AOC an aeroplane registered on another AOC: Provided
 - (a) the aeroplane is not registered on more than three AOCs;
 - (b) the aeroplane is maintained by only one AMO;
 - (c) the manual of procedures or maintenance control manual, as applicable, for all operators and the Operations Specifications for each operator, specify the AMO responsible for the maintenance of each shared aeroplane, by aeroplane registration number;
 - (d) the aeroplane flight folio used is the same for all operators, such that there is but one continuous record of the aeroplane's activities, and the flight crew members are trained in the procedures for completion of the flight folio;
 - (e) there is one method with respect to the entry, reporting and rectification of defect procedures and the flight crew members are trained in those procedures;
 - (f) the flight crew members use the MEL approved for the aeroplane and are trained in the MEL procedures for that particular aeroplane, if applicable, and the operations manual specifies the procedures the flight crew are to follow in the event contact with maintenance personnel is needed; and
 - (g) the flight crew members receive ground and flight training covering any differences between the model(s) operated by the operator and that being added to the AOC, including at least
 - (i) safety equipment contained on board;
 - (ii) ancillary equipment such as navigational aids, auto flight system, flight director or FMS, ACAS, TAWS, weather radar, etc; and
 - (iii) systems differences, engine/airframe limitations, performance considerations and operating characteristics,

and the results of such training are recorded on the flight crew member's training file.

- (4) The submission of an application under this Subpart does not place any obligation upon the Director to issue an AOC or operations specifications until he/she has been given reasonable time to review the application and the application has been adjudicated in terms of these Regulations.
- (5) The personnel referred to in sub-regulation (2)(a) shall be comprised of the following positions, as applicable to the type of operation proposed, the incumbents of which shall be approved by the Director
 - (a) chief executive officer;
 - (b) person responsible for flight operations;
 - (c) person responsible for aircraft;
 - (d) chief pilot;
 - (e) cabin crew manager;
 - (f) air safety officer;
 - (g) quality manager; and
 - (h) security manager.
- (6) The nominated post-holders required by sub-regulation (5) shall meet the qualifications and be responsible for the functions specified in Document SA-CATS 121 and shall be employed on a full time basis. For the purposes of this sub-regulation "full time employment" shall mean having spent sufficient time in the workplace to accomplish all duties within his or her area of responsibility.
- (7) Any person who held any of the positions listed in sub-regulation (5) prior to the commencement of these Regulations shall be deemed to meet the qualifications required by Document SA-CATS 121: Provided that
 - (a) for a nominated post-holder, such person is satisfactory to the Director;
 - (b) for an incumbent, that incumbent has discharged his or her responsibilities to the satisfaction of the Director; and
 - (c) for a nominated or incumbent post-holder, such person meets the qualifications specified in Document SA-CATS 121 within six months from the commencement of these Regulations.
- (8) When, after consideration of the scope and size of an operator, the Director is of the opinion that it would be appropriate, he or she may approve the assignment of more than one position to one person or approve different positions.

- (9) No person who has been approved for one or more management positions in terms of sub-regulations (5)(a) to (d) shall hold for a management position at another operator.
- (10) Notwithstanding any provision to the contrary in these Regulations, the Director may withdraw any approval where any manager no longer meets the qualifications required for that position or fails to discharge the responsibilities of that position.
 - (11) The Director may amend an AOC if -
 - (a) he or she determines that safety in commercial air transport and the public interest requires the amendment; or
 - (b) the holder of the AOC applies for an amendment, and the Director determines that safety in commercial air transport and the public interest requires such amendment.
- (12) If the Director stipulates in writing that an emergency exists requiring immediate amendment in the public interest with respect to safety in commercial air transportation, such an amendment becomes effective on the date the holder of an AOC receives such notice.
- (13) A holder of an AOC may make representations to the Director against the amendment contemplated in regulation (11)(a) or (12), but shall continue to operate in accordance with such amendment, unless it is subsequently varied or withdrawn.
- (14) Amendments approved by the Director, other than emergency amendments referred to in sub-regulation (12), become effective 30 days after notice to the holder of an AOC, unless the holder of the AOC makes representations against such proposal as contemplated in sub-regulation (13) prior to the effective date.
- (15) Amendments proposed by the holder of an AOC shall be made at least 30 days prior to the intended date of any operation under the proposed amendment.
- (16) No person may perform a commercial air transport operation for which an AOC amendment is required, unless that person has received notice of the approval from the Director.

Application, adjudication of and issuance of AOC or operations specifications

- **121.06.3** (1) In considering an application referred to in regulation 121.06.2 the Director may conduct any investigation he or she deems necessary to determine the applicant's ability to meet the requirements specified in this Part.
- (2) An application shall be granted and the appropriate aviation document issued, containing such conditions as the Director determines, if the Director is satisfied that
 - (a) the applicant will comply with the provisions of its air service operator certificate and operations specifications; and

- (b) the applicant will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, No. 60 of 1993, or the Air Service Licensing Act, No. 115 of 1990.
- (3) Where in the opinion of the Director an applicant has failed to provide satisfactory evidence of qualification for the document being sought, the applicant will be informed by the Director as to the deficiencies and will be given a reasonable opportunity to rectify such deficiencies after which time the Director shall grant or refuse the application concerned.
- (4) An AOC and associated operations specifications shall be issued in a prescribed form and contain at least the information prescribed in Document SA-CATS-OPS-121.

Validity and status of an AOC

- **121.06.4** (1) Unless otherwise specified by the Director, an AOC shall remain valid and in force for an indefinite period: Provided that
 - (a) the operator submits on or before the anniversary date of initial issue, the appropriate annual fee as prescribed in Part 187;
 - the operator successfully completes such audits and inspections as were carried out by the Director, including the satisfactory resolution of any findings reported to the operator by the Director;
 - (c) the AOC is not otherwise suspended, cancelled or voluntarily surrendered to the Director; and
 - (d) the operator continues to meet the requirements for issue of an AOC.
 - (2) An AOC is not transferable to any other entity.
- (3) Where an operator is notified by the Director that its AOC has been suspended or cancelled, the operator shall return the AOC to the Director within seven days of such notification.

Safety and security inspections and audits

- **121.06.5** (1) An applicant for the issuance of an AOC shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits which may be necessary to verify the validity of an application made in terms of regulation 121.06.2.
- (2) The holder of an AOC shall permit an authorised officer, inspector or authorised person to carry out such safety and security inspections and audits as may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Administrative duties of an AOC holder

121.06.6 (1) The holder of an AOC shall keep the AOC in a safe place and produce such AOC to an authorised officer or inspector for inspection if so requested by such officer or inspector.

- (2) An operator shall advise the Director of any changes in the personnel occupying the management positions specified in regulation 135.06.2(5) and shall submit the names and qualifications of the replacement person(s) for the Director's approval before effecting such changes: Provided that, in the case of the sudden departure of an incumbent, the operator shall notify the Director of the event and his or her intentions to ensure safety of operations while replacing such person.
- (3) An operator shall notify the Director in the event of any change in the ownership of the operator, including the names and contact details of the new owners.

Register of AOCs

- **121.06.7** (1) The Director shall maintain a register of all AOCs issued in terms of these regulations.
 - (2) The register shall contain the following particulars –
 - (a) the full name and, if any, the business name of the holder of the AOC;
 - (b) the postal address of the holder of the AOC;
 - (c) the number of the AOC issued to the holder;
 - (d) particulars of the type of air service for which the AOC was issued, including a list of operations specification issued;
 - (e) particulars of the category of aeroplane for which the AOC was issued; and
 - (f) the date on which the AOC was issued.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within 30 days from the date on which the AOC is issued.
 - (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Demonstration flights

- **121.06.8** (1) No person may operate an aircraft type in commercial air transport unless he or she first conducts satisfactory demonstration flights as required by the Director in that aircraft type.
- (2) No person may operate an aircraft in a designated special area, or use a specialised navigation system, unless he or she conducts a satisfactory demonstration flight as required by the Director.

- (3) The demonstration flights required by sub-regulations (1) and (2) shall be conducted in accordance with the regulations applicable to the type of operation and aircraft type used.
- (4) The Director may authorise deviations from this regulation if he or she finds that special circumstances make full compliance with the provisions of this regulation unnecessary.

SUBPART 7: FLIGHT OPERATIONS

Division One: General

Routes and areas of operation and aerodrome facilities

121.07.1 (1) Aeroplane dispatched over any route or airway in IMC shall be capable of –

- in the case of a twin engine aeroplane in the event of the failure of the critical engine, maintaining the minimum en route altitude published or established by the operator for such route or airway;
- (b) in the case of an aeroplane having three or more engines in the event of the failure of any two engines, maintaining the minimum *en route* altitude published or established by the operator for such route or airway; and
- (c) in addition to subparagraphs (a) and (b) and for flight in VMC, the aeroplane shall be capable of landing at the intended destination or alternate aerodrome in accordance with the provisions of regulations 121.08.8, 121.08.9 and 121.08.10.
- (2) The operator shall specify in its operations manual the procedures used to determine the minimum altitudes to be flown in order to meet the obstacle clearance requirements specified in regulation 121.07.27 and, for operations in uncontrolled airspace, the means for ensuring a navigational capability is maintained while operating on any route used therein.
- (3) The operator of an aeroplane shall select at least one destination alternate aerodrome for each IFR flight unless
 - (a) two separate runways, arranged such that the closure of one cannot affect the operations of the other and each with an operational straight-in instrument approach procedure, are available and usable by the flight crew at the destination aerodrome; and
 - (b) the duration of the flight from the departure aerodrome, or from the point of in-flight replanning, to the destination aerodrome is such that, taking into account all operational information relevant to the flight, for a period of at least one hour before and one hour after the estimated time of arrival, a reasonable certainty exists that the approach and landing may be made under VMC; or

- (c) the destination aerodrome is isolated and no suitable alternate aerodrome is available, in which case the provisions of regulation 91.07.7(6)(b) shall apply.
- (4) The operator of an aeroplane shall select at least two destination alternate aerodromes for IFR flights when the appropriate weather reports or forecasts for the destination aerodrome, or any combination thereof, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions will be below the applicable planning minima or no weather information is available at the destination aerodrome.
- (5) An air service operator shall not permit, nor may a PIC operate, a flight that is to be conducted in accordance with IFR, for which one or more destination alternate aerodromes are required, to be commenced unless the aerodrome meteorological forecast indicates that conditions for a period of at least one hour before until one hour after the estimated time of arrival at the destination alternate aerodrome(s) will meet or exceed those specified in Document SA-CATS 121.
- (6) The operator shall operate all flights in accordance with such route, aerodrome or other approvals and conditions pertaining to flight operations as are contained in the AOC.
 - (7) The operator shall ensure that –
 - (a) the equipment of the aeroplane intended to be used, complies with the minimum requirements for the planned operation; and
 - (b) except as approved by the Director in accordance with Document SA-CATS 121, no twin-engine aeroplane is operated under this Part over a route which contains a point further from an adequate and suitable aerodrome than the distance that can be flown, under standard conditions in still air, in 60 minutes at the one-engine inoperative cruise speed.
- (8) No operator shall commence a flight unless it has been ascertained by every reasonable means available that the ground facilities and services, including meteorological services, are available as required for the safe operation of the aeroplane and the protection of the passengers, are adequate for the type of operation being conducted and are functioning normally for their intended purpose.
- (9) The operator shall report without delay to the responsible authority any observed operational inadequacy of facilities referred to in sub-regulation (8).

Establishment of procedures

121.07.2 (1) An air operator shall –

- (a) establish for each aeroplane type, procedures and instructions for ground personnel and crew members pertaining to the duties for all types of operations on the ground and in flight;
- (b) establish a checklist system to be used by flight crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that the

- operating procedures in the operations manual referred to in regulation 121.04.2 are followed;
- (c) ensure that flight crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the aeroplane; and
- (d) ensure specific procedures are developed to instruct pilots with respect to rates of climb and descent in the various stages of flight.
- (2) The approved checklist system referred to in sub-regulation (1)(b) shall include –
- (a) an easy-to-use checklist for normal phases of flight operations;
- (b) a quick reference-type checklist dealing with all malfunctions requiring the use of abnormal or emergency procedures;
- (c) an amplified checklist that ensures all referenced check items are dealt with in accordance with the aeroplane manufacturer's recommended procedures;
- (d) an easy to locate and employ system of supplementary checks and/or procedures, if applicable; and
- (e) any other check items relating to the use of equipment not installed at the time of aeroplane manufacture or not included in the check system provided for in the approved aeroplane flight manual.
- (3) The PIC shall be responsible for ensuring all check procedures, including checklists, are managed in accordance with the procedures specified in the operator's operations manuals.

Competence of operations personnel

121.07.3 An air operator shall ensure that all personnel assigned to, or directly involved in ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

Use of air traffic services

121.07.4 An air operator shall ensure that air traffic services are used for all flights whenever available.

Single-engine aeroplane operations

121.07.5 No air service operator may operate a single-engine aeroplane under this Part.

Defect reporting

121.07.6 (1) An air operator shall establish adequate inspection and reporting procedures to ensure that defective equipment is reported to the PIC of the aeroplane before take-off and

where a defect is observed during flight, the PIC shall be responsible to ensure such defect is recorded and reported in the manner established in the operator's operations manual.

- (2) The procedures referred to in sub-regulation (1) shall be extended to include the reporting to the operator of all incidents of exceeding engine or airframe limitations that may occur while the flight crew are embarked on the aeroplane and of defective equipment found on board.
- (3) Upon receipt of the reports referred to in sub-regulation (2), the operator shall compile a report and submit such report on a monthly basis to the Director.

Instrument approach and departure procedures

- **121.07.7** An air service operator may implement instrument approach and departure procedures, other than instrument approach and departure procedures referred to in regulation 91.07.15: Provided that
 - (a) such instrument approach and departure procedures have been approved by the Director or the appropriate authority of the State in which such aerodrome is located; or
 - (b) the appropriate air traffic control clearance has been received from the ATSU.

Noise abatement procedures

- **121.07.8** (1) An air service operator shall establish operating procedures for noise abatement.
- (2) Take-off and climb procedures for noise abatement specified by the operator for any one aeroplane type may vary for different aerodromes.

Reporting of hazardous flight conditions

121.07.9 The PIC of any aeroplane that encounters flight conditions considered to be hazardous to his or her, or another aeroplane, shall report such conditions to any appropriate aeronautical station as soon as possible, giving such details as may be pertinent to the safety of other aeroplanes.

Refuelling and defuelling with passengers on board

121.07.10 No person shall refuel or defuel any aeroplane when passengers are embarking, disembarking or on board unless the fuelling is carried out in accordance with the procedures specified in Document SA-CATS 121 and such procedures are included in the operator's operations manual.

Reporting acts of unlawful interference

121.07.11 Following an act of unlawful interference, the pilot-in command shall –

- (a) where in his opinion the safety of persons on board the aeroplane would not be jeopardized, report the events to the nearest air traffic services authority by the most discrete method possible, by the means devised for such communications; and
- (b) submit, without delay, a report of such act to the Director in a form acceptable to the Director.

Cabin and flight deck signals

- **121.07.12** (1) An air service operator shall publish in a manner acceptable to the Director a system of signals to be used between the cabin and the flight deck during normal, abnormal, emergency and security operations.
- (2) The signals may be issued in an overt or covert manner.

DIVISION TWO: DISPATCH AND FLIGHT RELEASE RULES

Operational control and supervision of flight operations

- **121.07.13** (1) An air service operator shall establish and maintain an OCS that
 - (a) meets the requirements prescribed in Document SA-CATS 121; and
 - (b) is approved by the Director.
- (2) The Director may approve the use of a variation of the operational control systems described in Document SA-CATS 121 provided an equivalent level of operational control and supervision is demonstrated.
- (3) No operator shall dispatch a flight unless a flight release has been issued for the flight. The flight release procedures shall meet the requirements specified in Document SA-CATS 121 and be acceptable to the Director as appropriate to the type of operation.
- (4) Where a flight release has been issued with respect to a flight and not withdrawn prior to the take-off, the PIC has the final authority as to the commencement, continuation, diversion or termination of that flight.
- (5) Where a flight release has been issued with respect to a flight, it shall remain in force for the duration of the flight, from the originating point to the final destination, including en route stops, except where
 - (a) the aeroplane has been delayed or otherwise detained at the originating point or any *en route* station stop for a period of more than 4 hours;

- (b) any flight crew member has been changed from the original crew;
- (c) any crew member has exceeded his or her maximum flight duty time, necessitating an extension to such duty period;
- (d) the aeroplane has been involved in an incident or occurrence or has otherwise encountered a malfunction which may have altered the status of the maintenance release;
- (e) due to operational requirements, the aeroplane was forced to divert to an alternate or other airport, not included in the planned itinerary; or
- (f) in the opinion of the PIC or flight operations officer (FOO), if applicable, there has been significant change in the operational weather or other conditions upon which the flight release was issued, thereby rendering it invalid. In such situations the flight release may be withdrawn by either the PIC or the FOO.
- (6) The operator shall ensure that the OCS includes a means of following the progress of each flight as specified in Document SA-CATS 121 and that the communication equipment and facilities required for the flight watch or flight following system used are in place and serviceable during the period of time any of its flights is in progress.
- (7) For operations involving co-authority dispatch, the operator shall develop a conflict resolution policy that ensures that any disagreement that occurs between the PIC and a FOO with respect to the conduct of a proposed flight is resolved prior to flight.
- (8) The conflict resolution policy specified in sub-regulation (7) shall require a course of action that would provide the greatest margin of safety.
 - (9) The operator shall publish in the operations manual referred to regulation 121.04.2 –
 - (a) the details of its OCS, including the titles and functions of those persons authorized to exercise operational control over a flight:
 - (b) the policies and procedures associated with the type or types of OCS it intends to use in preparing for, releasing and monitoring its flights as well as the emergency procedures to be followed; and
 - (c) the conflict resolution policy in full detail.

Contracted services for an operational control system

- **121.07.14** (1) An air service operator may use the operational control system of an agent whether domestic or foreign: Provided
 - (a) for the implementation of a co-authority dispatch system, the agency and operator establish an equivalent system to that specified in technical standard 121.07.13 of Document SA-CATS 121; or

- (b) for the implementation of a pilot self-dispatch system, as specified in technical standard 121.07.13 of Document SA-CATS 121, the operator establishes a means to effectively interface with the contracted services; and
- (c) the service agreement is approved by the Director.
- (2) The methods, procedures and policies for effecting operational control using the agency shall be described in the operations manual referred to in regulation 121.04.2.

Operational flight plan and flight release

- **121.07.15** (1) An air service operator shall prepare an OFP for its flights as provided in technical standard 121.04.5 of Document SA-CATS 121.
- (2) The signatures or alternative means of signifying acceptance of the OFP by the PIC and flight operations officer, if applicable, as required by technical standard 121.04.5 of Document SA-CATS 121, shall constitute a flight release and certifies that
 - (a) the OFP has been prepared and accepted in accordance with the procedures specified in the operations manual; and
 - (b) the fight is safe to proceed.

Familiarity with weather conditions and technical data

- **121.07.16** No flight operations officer may release a flight unless he or she is thoroughly familiar with
 - (a) reported and forecast weather conditions on the route to be flown and at all planned destination and alternate aerodromes;
 - (b) the navigational requirements for the planned routes and aerodromes; and
 - (c) any other technical data relevant to the proposed flight including aerodrome operating minima, aeroplane performance, maintenance status, NOTAMs, bulletins or operational directives issued by the operations manager,

and that nothing in such information indicates there is a threat to the safety of the flight.

Retention of flight operations documents and reports

- **121.07.17** (1) Unless otherwise specified by the Director, every air service operator shall retain all flight documents made in terms of this Subpart, for a period of not less than 90 days.
- (2) All flight documentation required by this Subpart to be prepared with respect to a flight and which was carried onboard that flight shall be returned to the company's main base specified in the AOC. Such documentation shall include weather maps and printed information, NOTAMs, cargo and fuel loading sheets and manifests and all paperwork used to record the flight's progress or diversion and irregular or emergency situations.

Maintenance status

- **121.07.18** (1) No person may dispatch or release an aeroplane unless it is airworthy and all known defects have been rectified and appropriately certified by an aeroplane maintenance engineer except where the dispatch of the aeroplane is in accordance with an approved MEL issued in terms of regulation 121.07.19, a CDL approved by the State of Manufacture or as otherwise permitted in the aeroplane flight manual.
- (2) Under a co-authority dispatch system the pre-flight briefing issued by the flight operations officer shall include a full review of the aeroplane maintenance status.

Requirements for Minimum Equipment Lists

- **121.07.19** (1) Except as provided in sub-regulations (2) and (5), no person shall conduct a take-off in an aeroplane with instruments or equipment that are not serviceable or that have been removed, where such instruments or equipment are required by
 - (a) the standards of airworthiness that apply to day or night VFR or IFR flight, as applicable;
 - (b) any equipment list published by the aeroplane manufacturer respecting aeroplane equipment that is required for the intended flight;
 - (c) an AOC;
 - (d) an airworthiness directive; or
 - (e) these Regulations.
- (2) A person may conduct a take-off in an aeroplane with instruments or equipment that are not serviceable or that have been removed: Provided the aeroplane is operated in accordance with any conditions or limitations specified in a MEL, which has been approved by the Director as prescribed in Document SA-CATS 121 and, in the opinion of the PIC, aviation safety will not be affected.
- (3) An operator shall establish a MEL for each type of aeroplane for which a MMEL has been approved by the State of Manufacture of such aeroplane: Provided the State of Manufacture is a Contracting State and the manufacturing standards used by such State are at least equal to the ICAO standards for manufacturing.
- (4) No person may operate an aeroplane in accordance with a MEL unless such MEL is carried on board the aeroplane.
- (5) A person may conduct a take-off in an aeroplane that has instruments or equipment that are not serviceable or that have been removed where the aeroplane is operated in accordance with the conditions of a flight permit that has been issued by the Director or his delegate specifically for that purpose.

- (6) No person shall conduct a take-off in an aeroplane for which a MEL has not been approved and the aeroplane has instruments and equipment, other than the instruments and equipment specified in sub-regulation (1), that are not serviceable or that have been removed unless
 - (a) where the unserviceable instrument or equipment is not removed from the aeroplane, it
 is isolated or secured so as not to constitute a hazard to any other aeroplane system or
 to any person on board the aeroplane;
 - (b) the appropriate placards are installed as required by the maintenance control manual; and
 - (c) an entry recording the actions referred to in paragraphs (a) and (b) is made in the flight folio, as applicable.

Aerodrome operating minima

- **121.07.20** (1) An air service operator shall establish aerodrome operating minima in accordance with the provisions of sub-regulations (2), (3) and (4) in a manner approved by the Director.
- (2) The operator shall establish aerodrome operating minima for each aerodrome planned to be used, which shall not be lower than the values prescribed in technical standard 91.07.5 of Document SA-CATS 91, except as provided in regulation 121.07.36.
- (3) The operator shall conduct all instrument approaches and departures in accordance with the procedures approved for such operator in its operations specifications.
- (4) Where an operator is operating at an aerodrome other than a South African aerodrome, the aerodrome operating minima established by the operator may be lower than the minima established by the appropriate authority of the State in which such aerodrome is located: Provided that
 - (a) the State in which such aerodrome is located approves the lower operating minima; and
 - (b) the operator has been authorised in its operations specifications to operate to such lower minima.

Minimum flight altitudes

- **121.07.21** (1) An air service operator shall establish minimum flight altitudes and the methods to determine such minimum flight altitudes for all route segments to be flown which provide the required terrain clearance, taking into account the operating limitations referred to in Subpart 8 of this Part and the minimum altitudes prescribed in regulation 91.06.32.
- (2) The operator shall take into account the following factors when establishing minimum flight altitudes
 - (a) the accuracy with which the position of the aeroplane can be determined;

- (b) the probable inaccuracies in the indications of the altimeters used;
- (c) the characteristics of the terrain along the routes or in the areas where operations are to be conducted;
- (d) the probability of encountering unfavourable meteorological conditions; and
- (e) possible inaccuracies in aeronautical charts.
- (3) In complying with the provisions of sub-regulation (2), the operator shall give due consideration to
 - (a) corrections for temperature and pressure variations from standard values;
 - (b) the air traffic control requirements; and
 - (c) any contingencies which may occur along the planned route.

Ditching

121.07.22 An air service operator shall not operate an aeroplane with an approved passenger seating configuration of more than 30 seats over routes on which the aeroplane may be over water and at more than a distance corresponding to 120 minutes at cruising speed or 400 nm, whichever is the lesser, away from land suitable for making an emergency landing, unless such aeroplane has been certified as having adequate characteristics for ditching or has been approved as adequate for ditching.

Fuel policy

- **121.07.23** (1) An air service operator shall establish a fuel policy that meets the requirements prescribed in Document SA-CATS 121 for the purpose of flight planning and inflight replanning to ensure that every flight carries sufficient fuel for the planned operation and reserve fuel to cover deviations from the planned operation.
 - (2) The operator shall ensure that the planning of a flight is based upon –
 - (a) procedures, tables or graphs which are contained in or derived from current aeroplanespecific data or the operations manual referred to in regulation 121.04.2;
 - (b) the operating conditions under which the flight is to be conducted, including
 - (i) realistic aeroplane fuel consumption data;
 - (ii) anticipated masses:
 - (iii) expected meteorological conditions;
 - (iv) the effects of loss of facilities or services as identified in NOTAMs; and
 - (v) ATS procedures, restrictions and anticipated delays.

- (3) The operator shall establish policies and procedures with respect to fuel management and publish such policies and procedures in the operations manual referred to in regulation 121.04.2.
- (4) The policies and procedures required by sub-regulation (3) shall, as a minimum, include the requirement that
 - (a) in-flight fuel checks are to be performed at least hourly by or on behalf of the PIC to ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to a suitable aerodrome where a safe landing can be made with the planned final reserve fuel remaining; and
 - (b) the PIC shall declare a situation of urgency when the calculated usable fuel predicted to be available upon landing at the nearest suitable aerodrome where a safe landing can be made is less than the planned final reserve fuel.

Fuel supply and record keeping

- **121.07.24** (1) An air service operator shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out.
- (2) The operator shall keep a record of all fuel uplifts, including quantities and types. Record-keeping procedures shall be published in the operator's approved documents and shall be considered flight documents for record retention as prescribed in regulation 121.07.23.

Operation of aircraft in icing conditions

- **121.07.25** (1) No person shall conduct a take-off or continue a flight in an aeroplane when icing conditions are reported to exist or are forecast to be encountered along the route to be flown unless the aeroplane is equipped to be operated in such conditions and the aircraft type certificate authorises flight in such conditions.
- (2) In no case shall a flight be initiated or continued in icing conditions where in the opinion of the PIC, the conditions experienced may adversely affect the safety of the flight.
- (3) No person shall operate an aeroplane in icing conditions at night unless the aeroplane is equipped with a means to illuminate a representative surface or otherwise detect the formation of ice.

Surface contamination programme

- **121.07.26** (1) No person shall conduct or attempt to conduct a take-off in an aeroplane that has frost, ice or snow adhering to any of its critical surfaces.
- (2) Notwithstanding sub-regulation (1), a person may conduct a take-off in an aeroplane that has frost adhering to the underside of its wings that is caused by cold-soaked fuel, if the take-off is conducted in accordance with the aeroplane manufacturer's instructions for take-off under such conditions.

- (3) Where conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, no person shall conduct or attempt to conduct a take-off in an aeroplane unless the operator has established an aeroplane inspection programme in accordance with a surface contamination programme approved by the Director and the dispatch and take-off of the aircraft are in accordance with that programme.
- (4) The inspection referred to in sub-regulation (3) shall be performed by
 - (a) the PIC;
 - (b) a flight crew member of the aircraft who is designated by the PIC; or
 - (c) a person, other than a person referred to in paragraph (a) or (b), who
 - (i) is designated by the operator of the aeroplane; and
 - (ii) has successfully completed an aeroplane surface contamination training programme approved for such operator.
- (5) Where, before commencing take-off, a crew member of an aeroplane observes that there is frost, ice or snow adhering to the wings of the aeroplane, the crew member shall immediately report that observation to the PIC and the PIC, or a flight crew member designated by the PIC, shall inspect the wings of the aeroplane before take-off.
- (6) Before an aeroplane is de-iced or anti-iced, the PIC of the aeroplane shall ensure that the crew members and passengers are informed of the decision to do so.
- (7) An air service operator is not required to have a programme as required by subregulation (3) if it includes a statement in its operations manual that the operator will not dispatch its aeroplane into any region or country where it could be reasonably expected that surface contamination could at anytime form on the aeroplane, while parked or operating on the ground.

Reduced vertical separation minima – aeroplane monitoring

- **121.07.27** (1) An air operator authorised to operate in reduced vertical separation minima airspace shall ensure that a minimum of two aeroplanes of each aeroplane type grouping of its fleet have their height-keeping performance monitored at least once every two years or within intervals of 1 000 flight hours per aeroplane, whichever period is longer: Provided that, if an operator's aeroplane type grouping consists of a single aeroplane, monitoring of that aeroplane shall be accomplished within the specified period.
- (2) The monitoring requirements specified in sub-regulation (1) may be met through the use of data obtained from any air traffic services regional monitoring programme.

Inertial navigation systems and inertial reference systems

121.07.28 No air service operator shall use inertial navigation or reference systems (INS/IRS) unless the operator –

- (a) is authorised to do so in its operations specifications; and
- (b) complies with the INS/IRS requirements prescribed in Document SA-CAT 121.

Mass and balance control

- **121.07.29** (1) No person shall operate an aeroplane unless, during every phase of the flight, the load restrictions, mass and centre of gravity of the aeroplane conform to the limitations specified in the aeroplane flight manual.
- (2) An air service operator shall have a mass and balance programme that complies with regulation 91.07.11.
- (3) The operator shall specify in its operations manual its mass and balance programme and instructions to employees regarding the preparation and accuracy of mass and balance forms and the load and trim sheet in accordance with regulation 121.04.9.

Low visibility operations

121.07.30 No air service operator shall assign and no person shall conduct a low visibility take-off or Category II or III approach unless –

- (a) the operator meets the conditions prescribed in Document SA-CAT 121;
- (b) the operator is authorised to do so in its operations specifications; and
- (c) the LVO are conducted in accordance with the procedures approved for the operator in the operations manual referred to in regulation 121.04.2.

Operations with head-up displays or enhanced vision systems

- **121.07.31** (1) No air service operator shall use a head-up display (HUD) or enhanced vision system (EVS) unless the operator
 - (a) is authorised to do so in its operations specifications; and
 - (b) complies with the HUD or EVS, as applicable, requirements prescribed in Document SA-CATS 121.
- (2) The operator shall include the procedures for use of such equipment in the operations manual referred to in regulation 121.04.2.

Operations with electronic flight bags

- **121.07.32** (1) No air service operator shall use an electronic flight bag (EFB) unless the operator
 - (a) is authorised to do so in its operations specifications; and

- (b) complies with the EFB requirements prescribed in Document SA-CAT 121.
- (2) The operator shall include the procedures for use of such equipment in the operations manual referred to in regulation 121.04.2.

Division Three: Cabin safety

Carriage of infants

- **121.07.33** (1) An air service operator shall ensure that an infant is only carried when properly secured in the arms or on the lap of an adult passenger, or with a child restraint device or in a sky cot provided the sky cot is
 - (a) restrained so as to prevent it from moving under the maximum accelerations to be expected in flight; and
 - (b) fitted with a restraining device so as to ensure that the infant will not be thrown from such sky cot under the maximum accelerations to be expected in flight.
- (2) The operator shall ensure that precautions are taken to ensure that, at the times seat belts are required to be worn in flight, the infant carried in the sky cot will not be thrown from such sky cot under the maximum accelerations to be expected in flight.
- (3) No passenger may be responsible for the safety of more than one infant on board an aeroplane.
- (4) Infants shall not be carried behind a bulkhead unless a child restraint device is used during critical phases of flight and during turbulence.
 - (5) Sky cots may not be used during critical phases of flight.
- (6) Sky cots shall be positioned in such a way that they do not prevent or hinder the movement of adjacent passengers or block exits.
- (7) When an infant is carried in the arms or on the lap of a passenger, the seat belt, when required to be worn, shall be fastened around the passenger carrying or nursing the infant, but not around the infant.
- (8) When an infant is carried in the arms or on the lap of a passenger, the name of the infant shall be bracketed on the passenger list with the name of the person carrying or nursing the infant.
- (9) An infant may be seated in a car-type infant seat, approved for use in an aeroplane, provided
 - (a) the infant's seat is secured to the aeroplane seat in accordance with the instructions provided with the child seat;

- (b) the infant's seat is designed to be secured to a passenger seat by means of a single lap strap and face the same direction as the passenger seat;
- (c) the lower part of the shell does not unreasonably extend beyond the forward position of the passenger seat cushion on which it rests;
- (d) the infant's seat is secured to the passenger seat at all times during flight, even when it is unoccupied by the child;
- (e) only the infant shall be removed from the aircraft in an emergency evacuation, not the infant's seat;
- (f) the infant's seat is positioned in such a way that it does not prevent or hinder the movement of adjacent passengers or block exits;
- (g) the infant's seat is not placed in an aisle seat, depending on cabin configuration;
- (h) the infant's seat is used in accordance with infant weight limitations specified for such device; and
- (i) the infant's seat is fitted with a single release harness, which secures the infant's lap, torso and shoulders, but designed that the child can easily be secured in or removed from it.
- (10) An infant or a car-type infant seat referred to in sub-regulation (9) shall not be located in
 - (a) the same row or row directly forward or aft of an overwing emergency exit; or
 - (b) in the same row as any other exit unless such exit and row are separated by a bulkhead.

Carriage of persons with a disability

- **121.07.34** (1) An air service operator shall establish procedures, including identification, seating positions and handling in the event of an emergency, for the carriage of passengers with a disability.
 - (2) The operator shall ensure that -
 - (a) the PIC of the aeroplane is notified when a passenger with a disability is to be carried on board;
 - (b) a passenger with a disability is not seated in the same row or a row directly forward or aft of an emergency exit;
 - (c) individual briefings on emergency procedures are given to a passenger with a disability and his able-bodied assistant, appropriate to the needs of such passenger; and
 - (d) the person giving the briefing shall enquire as to the most appropriate manner of assisting the person with a disability so as to prevent pain or injury to that person.

- (3) In the case of the carriage of a stretcher patient in the aeroplane -
- (a) the stretcher shall be secured in such aeroplane so as to prevent it from moving under the maximum accelerations likely to be experienced in flight and in an emergency alighting such as a ditching;
- (b) the patient shall be secured by an approved harness to the stretcher or aeroplane structure; and
- (c) an able-bodied assistant shall accompany each stretcher patient.
- (4) A person with a mental disability shall not be carried in the aeroplane unless -
- (a) he or she is accompanied by an able-bodied assistant; and
- (b) a medical certificate has been issued by a medical practitioner certifying that the person with the mental disability is suitable for carriage by air and confirming that there is no risk of violence from such person.
- (5) The operator shall undertake the carriage of a person with a mental disability who, according to his medical history, may become violent, only after special permission has been obtained from the Director by such operator.
- (6) A passenger with a splinted or artificial limb may travel unaccompanied provided he or she is able to assist himself or herself.
- (7) The affected limb or supporting aids of a passenger referred to in sub-regulation (6) shall not obstruct an aisle or any emergency exit or equipment.
- (8) If a passenger with a splinted or artificial limb cannot assist himself or herself then he or she shall be accompanied by an able-bodied assistant.

Limitations on carriage of children and passengers with disability

- **121.07.35** (1) Unless otherwise authorised by the Director, the maximum number of passengers with a disability, unaccompanied minors, or a combination of such passengers and minors, which may be carried by an air operator, is limited to one per unit of 20 passenger capacity or part thereof to a maximum of 10 such passengers or minors.
- (2) At least one able-bodied assistant shall be carried for every group of five passengers with a disability or unaccompanied minors, or a part or combination thereof, and such assistant shall be assigned with the responsibility for the safety of such passengers or minors: Provided that the passengers with a disability can assist themselves.
- (3) In addition to the provisions of sub-regulation (2), for each one passenger with a disability who cannot assist himself or herself, an able-bodied assistant shall be assigned to solely assist such passenger.

- (4) The operator may establish procedures in lieu of the provisions of sub-regulations (2) and (3) for the carriage of children and passengers with a disability: Provided that such procedures
 - (a) do not jeopardise aviation safety; and
 - (b) prior written approval is obtained from the Director.

Carriage of persons without documentation, deportees or persons in custody

- **121.07.36** (1) An air operator shall establish procedures for the carriage of persons without documentation, deportees or persons in custody to ensure the safety of the aeroplane and its occupants.
- (2) The PIC of the aeroplane shall be notified by the operator prior to departure, of the intended carriage and the reason for carriage, of any of the persons referred to in sub-regulation (1).

Carry-on baggage

- **121.07.37** (1) An air operator shall establish adequate procedures to ensure that only such baggage is carried onto the aeroplane and taken into the passenger cabin as can be adequately and securely stowed.
- (2) The minimum requirements for the procedures referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 121.

Hold baggage screening

- **121.07.38** (1) An air operator engaged in international civil aviation operations, shall not carry any originating hold baggage unless such baggage has been screened prior to being loaded into the aircraft.
- (2) The minimum requirements for the procedures referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 121.
- (3) An operator engaged in a scheduled commercial air service shall not carry any originating hold baggage unless such baggage has been screened prior to being loaded into the aircraft.
- (4) The minimum requirements for the procedures referred to in sub-regulation (3) shall be as prescribed in Document SA-CATS 121.

Securing of passenger cabin and galley

- **121.07.39** (1) Before take-off and landing and whenever deemed necessary in the interests of aviation safety, the PIC shall ensure that
 - (a) all equipment, baggage and loose articles in the cabin of the aeroplane, including passenger service items and crew members' and passengers' personal effects, are properly secured and stowed so as to avoid the possibility of injury to persons or

- damage to such aeroplane through the movement of such articles caused by in-flight turbulence or by unusual accelerations or manoeuvres; and
- (b) all aisles, passage ways, exits and escape paths are kept clear of obstructions.
- (2) All solid articles shall be placed in approved stowage areas in the aeroplane at all times whenever the seat belt lights are illuminated or when so directed by the PIC of such aeroplane.
 - (3) For the purposes of sub-regulation (2), "approved stowage area" means –
 - (a) the area under a passenger seat; or
 - (b) a locker, overhead or other, utilised in accordance with the placarded mass limitation of the locker.
- (4) No take-off or landing shall be commenced by the PIC of the aeroplane unless he or she has been informed of the safe condition of the cabin.

Passenger services

- **121.07.40** (1) Except when in use, all items provided for passenger services, including food containers, thermos flasks and servicing trays, shall be carried in their respective stowages and secured against movement likely to cause injury to persons or damage to the aeroplane.
- (2) All items referred to in sub-regulation (1) shall be stowed during take-off and landing or during emergency situations, as directed by the PIC of the aeroplane.
- (3) Any item which cannot be accommodated in the stowage, referred to in sub-regulation (1), shall not be permitted in the cabin of the aeroplane.
- (4) Securing of the cabin shall be completed by the cabin crew members before the approach for landing of the aeroplane is commenced.
- (5) If passenger services are provided while the aeroplane is on the ground, no passenger service equipment shall obstruct the aisles or exits of the aeroplane.

Seats for cabin safety inspectors

121.07.41 An air service operator shall provide a cabin safety inspector who is performing an inflight cabin inspection with a confirmed passenger seat in the passenger compartment.

Briefing of passengers

- **121.07.42** (1) The PIC shall ensure that passengers are given a safety briefing in accordance with Document SA-CATS 121.
- (2) Where the safety briefing referred to in sub-regulation (1) is insufficient for a passenger because of that passenger's physical, sensory or comprehension limitations or because that passenger is responsible for another person on board the aeroplane, the PIC shall ensure that the passenger is given an individual safety briefing that is appropriate to the passenger's needs.

- (3) The PIC shall ensure that, in the event of an emergency and where time and circumstances permit, all passengers are given an emergency briefing in accordance with the Document SA-CATS 121.
- (4) The PIC shall ensure that each passenger who is seated next to an emergency exit is made aware of how to operate that exit.

Safety features card

121.07.43 An air service operator shall provide each passenger, at the passenger's seat, with a safety features card containing, in pictographic form, and any wording shall be in English or as required by the Director and shall contain such information as prescribed by Document SA-CATS 121.

SUBPART 8: AEROPLANE PERFORMANCE OPERATING LIMITATIONS

General requirements

- **121.08.1** (1) An air service operator shall not operate a large aeroplane unless such aeroplane meets the requirements specified in this Subpart.
- (2) Any determination made for the purposes of this Subpart shall be based on approved performance data set out in the aeroplane flight manual for the aeroplane concerned supplemented as necessary with other data acceptable to the Director.
- (3) A person may operate an aeroplane without complying with the requirements of this Subpart if the person
 - (a) is authorized to do so in the operator's operations specifications; and
 - (b) complies with the requirements as prescribed in SA-CATS 121.
- (4) Where an operator uses charts or graphs published in the approved aeroplane flight manual, allowance should be made to ensure any extract errors will be on the side of safety.
- (5) An operator shall adopt obstacle data sufficient to make accurate and safe performance calculations.
- (6) In complying with any of the provisions in this Subpart, all factors that significantly affect the performance of the aeroplane, as applicable to the phase of flight, shall be taken into account and which shall include as a minimum
 - (a) the mass of the aeroplane;
 - (b) the operating procedures employed by the operator;
 - (c) the pressure-altitude appropriate to the elevation of the aerodrome;

- (d) the ambient temperature;
- (e) the wind;
- (f) the runway slope; and
- (g) the surface conditions of the runway.
- (7) The factors specified in sub-regulation (6) shall be taken into account either directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.
- (8) An aeroplane shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.
- (9) A flight shall not be commenced unless the performance information provided in the flight manual, supplemented as necessary with other data acceptable to the Director, indicates that the standards prescribed in this Subpart can be complied with for the flight to be undertaken.

Take-off mass limitations

121.08.2 (1) No person shall conduct a take-off in an aeroplane if the mass of the aeroplane –

- (a) exceeds the maximum take-off mass specified in the aeroplane flight manual for the pressure altitude and the ambient temperature at the aerodrome where the take-off is to be made; or
- (b) after allowing for planned fuel consumption during the flight to the destination aerodrome or alternate aerodrome, exceeds the landing mass specified in the aeroplane flight manual for the pressure altitude and the ambient temperature at the destination aerodrome or alternate aerodrome.
- (2) No person shall conduct a take-off in an aeroplane unless the aeroplane is able, in the event of a critical engine failing or for other reasons, at any point in the take-off, either to discontinue the take-off and stop within the accelerate-stop distance available or to continue the take-off and clear all obstacles along the flight path by an adequate vertical or horizontal distance.
 - (3) In the determination of the maximum take-off mass referred to in sub-regulation (1) –
 - (a) the required accelerate-stop distance shall not exceed the accelerate-stop distance available (ASDA);
 - (b) the required take-off run shall not exceed the take-off run available (TORA); and
 - (c) the required take-off distance shall not exceed the take-off distance available (TODA).

- (4) For the purposes of sub-regulation (2), the following factors shall be applied –
- (a) the pressure altitude at the aerodrome;
- (b) the ambient temperature;
- (c) the runway slope in the direction of take-off;
- (d) not more than 50 per cent of the reported headwind component or not less than 150 per cent of the reported tailwind component;
- (e) loss of effective TORA during runway alignment except where rolling take offs are approved; and
- (f) where the runway condition is other than dry the appropriate penalty based upon the runway condition or contaminates shall be factored into the performance calculation.

Net take-off flight path

- **121.08.3** (1) No person shall conduct a take-off in an aeroplane if the mass of the aeroplane is greater than the mass specified in the aeroplane flight manual as allowing a net take-off flight path that clears all obstacles by at least 35 feet vertically or at least 62 meters horizontally within the aerodrome boundaries and by at least 95 meters horizontally outside those boundaries.
- (2) In the determination of the maximum mass, minimum distances and flight path referred to in sub-regulation (1)
 - (a) corrections shall be made for -
 - (i) the runway to be used;
 - (ii) the runway slope in the direction of take-off;
 - (iii) the pressure-altitude at the aerodrome;
 - (iv) the ambient temperature; and
 - (v) the wind component at the time of take-off, where not more than 50 per cent of the reported headwind component or not less than 150 per cent of the reported tailwind component may be considered; and
 - (b) calculations shall be based on the pilot
 - (i) not banking the aeroplane before reaching an altitude of 50 feet;
 - (ii) subject to sub-regulation (3), using 15 degrees or less of bank at or below 400 feet;

- (iii) using no more than 25 degrees of bank thereafter, aeroplane speed and configuration permitting; and
- (c) consideration of the effects of any crosswind and navigation accuracy shall be taken into account.
- (3) A bank angle greater than the 15 degrees referred to in sub-regulation (2)(b)(ii) may be used if it is authorized by the Director.

En route limitations with one engine inoperative

- **121.08.4** (1) No person shall conduct a take-off in an aeroplane if the mass of the aeroplane is greater than the mass that will allow the aeroplane to attain, with any engine inoperative, a net flight path that
 - (a) has a positive slope at 1 000 feet above all terrain and obstructions within five nautical miles on either side of the intended track, at all points along the route or planned diversion therefrom; or
 - (b) will permit flight from the cruising altitude to an aerodrome where the requirements of regulation 121.08.6 can be complied with and clears vertically, by at least 2 000 feet, all terrain and obstructions within five nautical miles on either side of the intended track.
- (2) For the purposes of sub-regulation (1), the following factors shall be taken into account after an engine failure
 - (a) the effects of wind and temperature on the net flight path; and
 - (b) the effects of fuel jettisoning, where the jettisoning is conducted in accordance with procedures set out in the operator's operations manual and sufficient fuel remains to complete a landing with the required fuel reserves.

En route limitations with two engines inoperative

- **121.08.5** (1) No person shall operate an aeroplane having three or more engines unless the mass of the aeroplane is not greater than the mass that, according to the two-engines-inoperative *en route* net flight path data shown in the aeroplane flight manual, will allow the aeroplane to clear vertically, by at least 2,000 feet, all terrain and obstructions within five nautical miles on either side of the intended track and thereafter to continue flight to an aerodrome where the requirements of regulation 121.08.6 can be complied with.
- (2) For the purposes of sub-regulation (1)(b), the following factors shall be taken into account after the failure of two engines
 - (a) the effects of wind and temperature on the net flight path; and
 - (b) the effects of fuel jettisoning, where the jettisoning is conducted in accordance with procedures set out in the operator's operations manual and sufficient fuel remains to

arrive at the destination aerodrome at 1 500 feet AGL with a fuel reserve sufficient to fly for 15 minutes thereafter at cruise power.

Dispatch limitations: landing at destination and alternate aerodromes

121.08.6 (1) Subject to sub-regulation (3), no person shall dispatch or conduct a take-off in an aeroplane unless –

- (a) the mass of the aeroplane on landing at the destination aerodrome will allow a full-stop landing
 - (i) in the case of a turbojet- or turbofan-powered aeroplane, within 60 per cent of the landing distance available (LDA), or
 - (ii) in the case of a propeller-driven aeroplane, within 70 per cent of the landing distance available (LDA); and
- (b) the mass of the aeroplane on landing at the alternate aerodrome will allow a full-stop landing –
 - (i) in the case of a turbojet- or turbofan-powered aeroplane, within 60 per cent of the landing distance available (LDA), and
 - (ii) in the case of a propeller-driven aeroplane, within 70 per cent of the landing distance available (LDA).
- (2) In determining whether an aeroplane can be dispatched or a take-off can be conducted in accordance with sub-regulation (1), the following shall be taken into account
 - (a) the pressure altitude at the destination aerodrome and at the alternate aerodrome;
 - not more than 50 per cent of the reported headwind component or not less than 150 per cent of the reported tailwind component may be used in computing distances for take-off or landing; and
 - (c) that the aeroplane must be landed on a suitable runway, considering the wind speed and direction, the ground handling characteristics of the aeroplane and other conditions such as landing aids and terrain.
- (3) Where conditions at the destination aerodrome at the time of take-off do not permit compliance with sub-regulation (2)(c), an aeroplane may be dispatched and a take-off conducted if the alternate aerodrome designated in the OFP permits, at the time of take-off, compliance with sub-regulations (1)(b) and (2).
- (4) Where the aerodrome of intended landing has in place noise criteria that may require a landing mass reduction, the take off mass shall be adjusted to comply with such limitations.

Dispatch limitations: wet runway - turbojet- or turbofan-powered aeroplanes

- **121.08.7** (1) Subject to sub-regulation (2), when weather reports or forecasts indicate that the runway may be wet at the estimated time of arrival, no air service operator shall dispatch or conduct a take-off in a turbojet- or turbofan-powered aeroplane unless the landing distance available (LDA) at the destination aerodrome is at least 115 per cent of the landing distance required in terms of regulation 121.08.6(1)(a).
- (2) The landing distance available on a wet runway may be shorter than that required by sub-regulation (1) but not shorter than that required by regulation 121.08.6, if the aeroplane flight manual includes specific information about landing distances on wet runways.

Landing at destination and alternate aerodromes

- **121.08.8** (1) An air operator shall ensure that the landing mass of the aeroplane, determined in accordance with the provisions of regulation 121.08.1(9), does not exceed the maximum landing mass specified for the altitude and the ambient temperature expected for the estimated time of landing at the destination and alternate aerodrome.
- (2) For instrument approaches with decision heights below 200 feet, the operator shall verify that the approach mass of the aeroplane, taking into account the take-off mass and the fuel expected to be consumed in flight, allows a missed approach gradient of climb of at least 2,5 per cent in the approach configuration with one engine inoperative, or an approved alternative procedure.

Landing on dry runways

- **121.08.9** (1) An air operator shall ensure that the landing mass of the aeroplane for the estimated time of landing, allows a full stop landing from 50 feet above the threshold within 70 per cent of the landing distance available at the destination aerodrome and at any alternate aerodrome: Provided that the Director may permit the use of a screen height of less than 50 feet, but not less than 35 feet, for steep-approach and short-landing procedures.
- (2) When complying with the provisions of sub-regulation (1), the operator shall take account of
 - (a) the pressure altitude at the aerodrome; and
 - (b) not more than 50 per cent of the reported head-wind component or not less than 150 per cent of the reported tail-wind component.

Landing on wet and contaminated runways

- **121.08.10** (1) An air operator shall ensure that, when the appropriate weather reports or forecasts, or a combination thereof, indicate that the runway at the estimated time of arrival may be wet, the landing distance available is at least 115 per cent of the required landing distance determined in accordance with the provisions of regulation 121.08.9.
- (2) The operator shall ensure that, when the appropriate weather reports or forecasts, or a combination thereof, indicate that the runway at the estimated time of arrival may be contaminated, the landing distance available must be at least the landing distance determined in accordance with the provisions of sub-regulation (1) or at least 115 per cent of the landing

distance determined in accordance with approved contaminated landing distance data or an equivalent thereof, whichever is the greater.

(3) A landing distance on a wet runway shorter than the landing distance required by the provisions of sub-regulation (1), but not less than the landing distance required by the provisions of regulation 121.08.9(1), may be used if the aeroplane flight manual referred to in regulation 121.04.4 includes specific additional information on landing distances on wet runways.

SUBPART 9: MAINTENANCE

General

121.09.1 An air service operator shall not operate any aeroplane under this Part unless such aeroplane is maintained in accordance with the regulations in Part 43.

Aeroplane maintenance programme

- **121.09.2** (1) Each air service operator shall ensure that the aeroplane is maintained in accordance with an aeroplane maintenance programme established by the operator.
- (2)(a) The operator shall provide a maintenance programme, approved by the Director, containing the information required by sub-regulation (3) for the use and guidance of the maintenance and operational personnel concerned.
- (b) The design and application of the operator's maintenance programme shall observe human factors principles.
- (3) The maintenance programme referred to in sub-regulation (1) shall be developed for each aeroplane type and shall contain the following information
 - (a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;
 - (b) when applicable, a continuing structural integrity programme;
 - (c) procedures for changing or deviating from paragraphs (a) and (b) above; and
 - (d) when applicable, condition monitoring and reliability programme descriptions for aircraft systems, components and powerplants.
- (4) Maintenance tasks and intervals that have been specified as mandatory in approval of the type design shall be identified as such.
- (5) The aeroplane maintenance programme referred to in sub-regulation (1) and any subsequent amendment thereof shall be approved by the Director.
- (6) Upon approval of the Director, copies of all amendments to the maintenance programme shall be furnished promptly to all organizations or persons to whom the maintenance programme has been issued.

Maintenance contracted to approved AMO

121.09.3 If maintenance on a large commercial air transport aeroplane is carried out by the holder of an AMO approval with the appropriate rating issued in terms of Part 145, the operator of the aeroplane shall ensure that all contracted maintenance is carried out in accordance with the regulations in Part 43.

Operator's maintenance responsibilities

- **121.09.4** (1) An air service operator shall establish procedures acceptable to the Director that ensure -
 - (a) each aeroplane they operate is maintained in an airworthy condition;
 - (b) the operational and emergency equipment necessary for an intended flight is serviceable; and
 - (c) the Certificate of Airworthiness of each aeroplane they operate, and any appropriate special conditions, remains valid.
- (2) The operator shall not operate an aeroplane unless it is maintained and released to service by an organization approved in accordance with Part 145 in the manner referred to in regulation 121.09.3.
- (4) The operator shall employ sufficient personnel to ensure that all maintenance is carried out in accordance with the maintenance control manual referred to in regulation 121.09 5.
- (5) The operator shall ensure that the maintenance of its aeroplanes is performed in accordance with the maintenance programme referred to in regulation 121.09.2.

Operator's maintenance control manual

- **121.09.5** (1) An air service operator shall provide a maintenance control manual (MCM) that meets the requirements prescribed in technical standard 43.02.3 of Document SA-CATS 43 for the use and guidance of maintenance and operational personnel concerned.
- (2) The MCM referred to in sub-regulation (1) shall incorporate relevant principles of human factors.
- (3) The operator shall provide two copies of its proposed MCM to the Director and one copy of the approved MCM shall remain in the custody of the Director.
- (4)(a) The operator shall amend its MCM as necessary in accordance with the amendment procedures contained in the MCM, in order to keep the information contained therein up-to-date and accurately reflect company policy with respect to the maintenance of its aeroplanes.
- (b) The operator shall forward two copies of all amendments to the MCM to the Director for approval.

- (5) Upon receipt of any approved amendments, each holder of an MCM shall be furnished a copy of such amendment with clear instructions to insert the amended pages in a timely manner into the MCM.
- (6) The Director may require an operator to produce an amendment where he or she is of the opinion that the MCM requires updating.

Maintenance records

- **121.09.6** (1) An air service operator shall ensure that the following records are kept for the periods prescribed in sub-regulation (2)
 - (a) the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life limited components;
 - (b) the current status of compliance with all mandatory continuing airworthiness information;
 - (c) appropriate details of modifications and repairs;
 - (d) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components subject to a mandatory overhaul life;
 - (e) the current status of the aeroplane's compliance with the maintenance programme; and
 - (f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
- (2) The records in sub-regulation (1)(a) to (e) shall be kept for a minimum period of 6 months after the unit to which they refer has been permanently withdrawn from service and the records in sub-regulation (1)(f) for a minimum period of 5 years after the signing of the maintenance release.
- (3) In the event an aeroplane is leased or otherwise transferred temporarily to another operator, the records shall be made available to the new operator.
- (4) In the event of any permanent change of operator, the records shall be transferred to the new operator.

Continuing airworthiness information

- **121.09.7** An air service operator shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide such information as required by the Director and shall report said information to him or her using a reporting system developed for that purpose.
- (2) The Director shall transmit all mandatory continuing airworthiness information reported to him or her in accordance with sub-regulation (1) to the State of Design of any aeroplane that has been issued a South African Certificate of Airworthiness and operated in terms of this Part.

(3) The operator shall obtain and assess continuing airworthiness information and recommendations issued by an aeroplane manufacturer, the organization responsible for the aeroplane type design or by the State of Design, or any additional requirements issued by the Director for each type of aeroplane operated under this Part and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the Director.

Modifications and repairs

- **121.09.8** (1) All modifications and repairs shall comply with airworthiness requirements acceptable to the Director.
- (2) Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

SUBPART 10: SAFETY AND QUALITY MANAGEMENT SYSTEMS

Division One: Safety management system

Requirement for safety management system

- **121.10.1** (1) An air service operator shall ensure that it maintains an acceptable level of safety by establishing and maintaining a SMS that meets the requirements of this Subpart and is approved by the Director.
 - (2) The operator shall adhere to its approved SMS.

Components of safety management system

121.10.2 A SMS shall include –

- (a) a safety policy on which the system is based expressing a firm commitment to all elements of the programme, including financial and human resources, that the accountable executive has approved and communicated to all employees;
- (b) a process for defining expected levels of safety performance and setting safety targets for the improvement of aviation safety and for measuring the attainment of those targets;
- (c) a process for identifying hazards to aviation safety and for evaluating and managing the associated risks;
- (d) a process for the internal reporting and analyzing of hazards and for developing remedial action plans for the timely resolution of all identified safety hazards;
- (e) a process for the early alerting of the persons responsible for operations or maintenance about known or suspected hazards that would require immediate safety resolution action to be taken through the operational or maintenance control systems;
- (f) a process for the internal reporting of suspected safety concerns or occurrences of a

sensitive nature providing the assurance of anonymity to the person reporting and where possible, immunity from disciplinary action against any person involved in such occurrence.

- (g) a quality assurance programme, except where an operator develops a quality management system in terms of Division two of this Subpart;
- (h) a process for conducting periodic scheduled reviews or audits of the SMS as well as reviews or audits of the SMS occasioned by any event affecting or, if left unattended, could affect safety;
- (i) a process for the investigation of accidents and incidents for the purposes of implementing reactive safety measures;
- (j) a process of enhancing safety awareness through communication and a system for safety promotion;
- (k) an advertised schedule of safety meetings and a means of informing company personnel of the minutes and actions arising out of such meetings;
- (I) a process for the continuous improvement of the SMS that is capable of monitoring and measuring improvement to the overall level of safety performance;
- (m) in the case of aeroplanes of a maximum certificated take-off mass in excess of 27 000 kg, a flight data analysis programme shall form part of its SMS. Such program shall incorporate safeguards when requested, for the anonymity of the data source and the nature of the programme shall in any case be non-punitive;
- (n) procedures for analysing data obtained under paragraph (m) above and during an audit conducted under sub-regulation (1)(i) and for taking corrective actions;
- (o) training requirements for the persons responsible for operations and maintenance and other personnel assigned duties under the SMS; and
- (p) procedures for making progress reports to the accountable executive at intervals determined by the accountable manager and other reports as needed in urgent cases.

Development and approval of safety management manual

- **121.10.3** (1) Except as provided in sub-regulation (2), an air service operator shall establish a safety management manual (SMM) that is as prescribed in Document SA-CATS 121.
- (2) The operator's SMM shall be submitted to the Director for approval who may in view of the operator's size and complexity, determine that the information required by sub-regulation (2) need not be contained in a separate manual. In such case the information shall be included in the operator's approved operations and maintenance control manuals, as applicable.

Establishment and structure of safety management system

121.10.4 (1) The establishment of a SMS shall be as prescribed in Document SA-CATS 121 and be the responsibility of the accountable executive specified in regulation 121.06.2(5)

- (2) The accountable executive shall nominate an air safety officer (ASO), as specified in regulation 121.06.2(5)(f), who meets the qualifications and performs the functions specified in technical standard 121.06.2 of Document SA-CATS 121.
- (3) The ASO shall nominate sufficient personnel to fill the key positions identified by the programme in consideration of the scope, size and complexity of the operator and develop the programme to include clear lines of reporting.
- (4) The ASO shall be responsible for the review of safety data and assessment of all analytical information, the development of corrective recommendations arising from such reviews and the presentation of corrective recommendations to the accountable executive and the person responsible for operations or maintenance, as applicable. The person responsible for operations or maintenance shall be responsible for the final development and implementation of all corrective action plans in a manner that will ensure the timely resolution of safety issues.
- (5) Where the persons responsible for operations or maintenance have delegated any responsibility held under these regulations to another person, such person shall keep the respective manager currently informed. The respective manager shall maintain responsibility for the corrective action plans arising out of the SMS.

Holder of more than one certificate

121.10.5 The holder of an AOC issued in terms of this Part who is also the holder of an approved maintenance organization certificate issued under Part 145, shall adhere to the requirements referred to in Part 145 with regard to a SMS when undertaking maintenance control activities.

Size and complexity

121.10.6 The size and complexity of an approved SMS shall be determined by the Director and measured in terms of scope and size as well as the hazards and risks associated with the activities being carried out by the certificate holder.

Division Two: Quality management system

Requirement for quality management system

- **121.10.7** (1) An air service operator shall establish a quality management system (QMS) that meets the requirements prescribed in Document SA-CATS 121.
- (2) The quality management system shall
 - (a) include a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards and procedures; and
 - (b) be described in relevant documentation as prescribed in Document SA-CATS 121.

- (3) The operator shall designate a person responsible for the QMS who meets the qualifications and experience requirements and who will be responsible for the functions as prescribed in technical standard 121.06.2 of Document SA-CATS 121.
- (4) The operator shall prepare a quality management manual that meets the requirements prescribed in Document SA-CATS 121.
- (5) Notwithstanding sub-regulation (3) above, the operator may appoint two quality managers, one for flight operations and one for maintenance: Provided the operator has designated one single quality management unit to ensure that the quality system is applied uniformly throughout the entire operation.

PART 127: COMMERCIAL AIR TRANSPORT AND GENERAL AVIATION OPERATIONS: HELICOPTERS

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SUBPART 9: MAINTENANCE

127.09.1	General
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127.09.3	Maintenance contracted to approved AMO

SUBPART 1: GENERAL

Applicability

127.01.1 (1) This Part applies to –

- (a) helicopters engaged in commercial air transport operations within the Republic;
- (b) helicopters registered in the Republic and engaged in commercial international air transport operations;
- (c) persons acting as flight crew members of helicopters referred to in these Regulations; and
- (d) persons who are on board a helicopter operated under this Part.
- (2) For the purposes of this Part, a helicopter registered in another State and operated by the holder of an operating certificate issued in the Republic, shall be deemed to be registered in the Republic.

(3) The provisions of Part 91 apply with the necessary changes to any helicopter operated in terms of this Part.

Exemptions

- **127.01.2** (1) The Director may exempt any helicopter or person involved in emergency operations from the provisions of this part, on the conditions as prescribed in Document SA-CATS 127.
- (2) An application for an exemption shall be made in accordance with the provisions of Part 11.

Admission to cockpit

- **127.01.3** (1) The operator of a commercial air transport helicopter shall ensure that no person is admitted to, or carried in the cockpit of the helicopter unless such person is
 - (a) a flight crew member assigned to the flight;
 - (b) an authorised officer, inspector or authorised person; or
 - (c) permitted by, and carried in accordance with, the instructions contained in the operations manual referred to in regulation 127.04.2.
- (2) The final decision regarding the admission of any person to the cockpit shall be the responsibility of the PIC.
- (3) The admission of any person to the cockpit shall not interfere with the operation of the helicopter.
- (4) Any person carried in the cockpit shall be made familiar with the applicable procedures.
- (5) For purposes of this Part, the expression 'cockpit' shall have the same meaning as the expression 'flight deck'.

Drunkenness

- **127.01.4** (1) The operator of a commercial air transport helicopter shall not permit, and no person shall enter or be in the helicopter while under the influence of alcohol or a drug having a narcotic effect, to the extent where the safety of such helicopter or its occupants is, or is likely to be, endangered.
- (2) The operator shall establish procedures to ensure that any person referred to in sub-regulation (1) is
 - (a) refused embarkation; or
 - (b) if such person is on board, restrained or disembarked.

Preservation of documents

127.01.5 The operator of a commercial air transport helicopter who is required to retain any of the documents for a specified period referred to in subpart 4, shall retain such documents for

such specified period irrespective of the fact that such operator, before the expiry of such specified period, ceases to be the owner or possessor of the helicopter concerned.

SUBPART 2: FLIGHT CREW

Composition of flight crew

- **127.02.1** (1) The minimum number and composition of the flight crew shall not be less than the minimum number and composition specified in the helicopter flight manual referred to in regulation 91.03.2.
- (2) The operator of a commercial air transport helicopter shall allocate additional flight crew members when it is required by the type of operation, and the number of such additional flight crew members shall not be less than the number specified in the operations manual referred to in regulation 127.04.2.
- (3) The operator shall ensure that the flight crew members
 - (a) are competent to perform the duties assigned to them; and
 - (b) hold the appropriate valid licences and ratings.
- (4) The flight crew shall include at least one member who holds a valid radiotelephony operator licence or equivalent document issued by an appropriate authority, authorising such member to operate the type of radio transmitting equipment to be used.
- (5) When deemed necessary for the safe conduct of a flight, the flight crew shall include at least one member who is proficient in navigating over the route to be flown.
- (6) The operator shall ensure that the flight crew of a commercial air transport helicopter consists of two pilots
 - (a) in the case of operations under IFR or by night when more than nine passengers are carried; or
 - (b) in the case of any operation when more than 19 passengers are carried.
- (7) A helicopter, other than a helicopter referred to in sub-regulation (6), may be operated by a single pilot: Provided that the requirements referred to in sub-regulation (8) are complied with: Provided further that if the requirements referred to in sub-regulation (8) are not complied with, the minimum flight crew shall be two pilots.
- (8) A helicopter referred to in sub-regulation (7) may be operated by a single pilot in VMC by night if the following requirements are complied with:
 - (a) The helicopter shall be certificated and equipped for single-pilot night operations;
 - (b) The operator shall include, in the operations manual, referred to in regulation 127.04.2, a recurrent training programme for pilots which includes the additional requirements for a single-pilot night VFR operation;
 - (c) the cockpit procedures shall include-

- (i) use of night flying equipment, including lights and lighting;
- (ii) use of normal, abnormal and emergency checklist;
- (iii) departure and approach procedures;
- (iv) simplified in-flight documentation; and
- (v) if applicable: stability augmentation or automatic flight control system management.
- (d) The recurrent checks prescribed in subpart 3 shall be performed at night in the single-pilot role in an environment suitable for the type of operation involved;
- (e) The pilot concerned shall have a minimum of 50 hours of flight time on the specific type of helicopter, of which 10 hours shall be as PIC;
- (f) The pilot concerned shall during the ninety days immediately preceding the intended flight have—
 - (i) executed, by night, not less than three circuits (including take-off and landing); or
 - (ii) passed the appropriate skill test or proficiency check prescribed in Part 61 for the helicopter night rating in the type of helicopter in which the intended flight is to be undertaken.
- (g) If the helicopter has not been fitted with a stability augmentation system or automatic flight control system, night flight time shall be limited to two periods of maximum two continuous hours, with a rest period of at least half an hour in between.
- (9) A helicopter, referred to in sub-regulation (7), may be operated by a single pilot in IMC if the following requirements are complied with:
 - (a) the helicopter shall be certificated and equipped for single-pilot IFR operations, as prescribed by regulation 127.05.3;
 - (b) the operator has included in the operations manual, referred to in regulation 127.04.2, an approved conversion and recurrent training programme for pilots, which includes the additional requirements for a single-pilot IMC operation, as prescribed by regulation 127.03.3;
 - (c) the cockpit procedures shall include-
 - (i) use of normal, abnormal and emergency checklist;
 - (ii) operation with partial instrument panel;
 - (iii) departure and approach procedures;
 - (iv) stability augmentation or automatic flight control system management; and
 - (v) simplified in-flight documentation.
 - (d) the recurrent checks prescribed in Subpart 3 shall be performed in the single-pilot role in an environment representative of the operation;
 - (e) the pilot concerned shall be the holder of a valid instrument rating for helicopters and have completed, in helicopters, not less than 1 000 hours of flight time, of which -
 - (i) 250 hours shall be as PIC, or not less than 100 hours as PIC and the necessary additional flight time as co-pilot performing, under the supervision of the PIC, the duties and functions of a PIC;
 - (ii) 200 hours shall be cross-country flight time, of which not less than 100 hours shall be as PIC or as co-pilot performing, under the supervision of the PIC, the duties and functions of a PIC:
 - (iii) 30 hours shall be simulated or actual instrument time, of which not more than 10 hours may have been acquired in a simulator approved for the purpose;
 - (f) the pilot concerned shall during the ninety days immediately preceding the intended flight have—

- (i) executed at least three approaches, either under actual or simulated conditions with reference to flight instruments only; or
- (ii) passed the appropriate skill test or proficiency check for the helicopter instrument rating as prescribed in Part 61, in the type of helicopter in which the intended flights to be undertaken;
- (g) if the helicopter has been equipped with a stability augmentation system only rather than with an automatic flight control system, instrument flight time shall be limited to periods of maximum two continuous hours with either a rest period or flight in VMC by day of at least half an hour between such periods.
- (10) Notwithstanding the provisions of sub-regulation (9), no person may operate a helicopter in a Category II or Category III approach and landing operation unless the flight crew includes a properly rated second pilot.
- (11) Nothing is this regulation shall be construed as meaning that a flight under IFR or at night for the purpose of flight instruction conducted by an appropriately rated flight instructor would be a single-pilot operation, or that such a training flight, if conducted in terms of Part 127 would require to be operated by two qualified pilots.
- (12) The operator shall designate one pilot among the flight crew as PIC of a commercial air transport helicopter and the PIC may delegate the conduct of the flight to another suitably qualified pilot.

Flight crew member emergency duties

- **127.02.2** (1) The operator and, where appropriate, the PIC of a commercial air transport helicopter, operated by a multi-crew, shall assign to each flight crew member concerned, the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.
- (2) The functions referred to in sub-regulation (1) shall be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration the possible incapacitation of individual flight crew members.
- (3) The operator shall prove to the satisfaction of the Director that the flight crew members are competent to perform such functions, by means of an emergency evacuation demonstration carried out in accordance with the requirements prescribed in Document SA-CATS 127.
- (4) The operator shall carry out an emergency evacuation demonstration referred to in subregulation (3) when a new type or variant of helicopter or new configuration of an existing helicopter is introduced for use.
- (5) A flight crew member shall not accept an assignment of emergency functions unless such flight crew member has been trained to perform emergency functions in accordance with the requirements prescribed in Subpart 3.

Recency, route and heliport qualifications

- **127.02.3** (1) A pilot shall not act as PIC of a commercial air transport helicopter used in a scheduled public air transport service operation, unless the pilot has within the preceding 12 months demonstrated to the operator of such helicopter an adequate knowledge of
 - (a) the route to be flown;
 - (b) the helicopters to be used;
 - (c) the procedures applicable to flight paths over densely inhabited areas and areas of higher traffic density; and
 - (d) obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures including operating minima.
- (2) If a route requires a specific type of navigation qualification, the PIC shall within the 12 months immediate preceding a flight on such route, demonstrate his or her ability to the operator of the commercial air transport helicopter by
 - (a) flying over a route as PIC using the applicable special type of navigation system; or
 - (b) flying over a route under the supervision of a suitably qualified pilot using the applicable special type of navigation system.

Cabin crew member complement

- **127.02.4** (1) If the certificate of airworthiness of a commercial air transport helicopter requires the carrying of one or more cabin crew members, the operator of the helicopter shall not, when carrying one or more passengers, operate such helicopter without carrying the minimum number of cabin crew as prescribed in Document SA-CATS 127.
- (2) Cabin crew members are carried for the purpose of performing duties relating to the safety of passengers and other duties assigned by the operator or the PIC.
- (3) In unforeseen circumstances, the operator may reduce the required minimum number of cabin crew members: Provided that
 - (a) the number of passengers are reduced in accordance with the procedures specified in the operations manual referred to in regulation 127.04.2; and
 - (b) a report is submitted to the Director after completion of the flight.

Operation on more than one type or variant by cabin crew member

- **127.02.5** (1) A cabin crew member shall not operate on more than three helicopter types: Provided that the Director may approve the operation on four helicopter types if the emergency and safety equipment and procedures for at least two of the helicopter types are similar.
- (2) The types of helicopter which are similar in respect of emergency and safety equipment and procedures, shall be listed in Document SA-CATS 127.

Senior cabin crew member

127.02.6 (1) The operator of a commercial air transport helicopter shall appoint a senior cabin crew member whenever more than one cabin crew member is carried on board the helicopter.

- (2) The senior cabin crew member shall be responsible to the PIC for the conduct of cabin operations and the coordination and performance of cabin crew duties.
- (3) The operator shall establish procedures to select the next most suitably qualified cabin crew member to operate as senior cabin crew member in the event of the nominated senior cabin crew member being unable to operate.

Cabin crew emergency evacuation stations

127.02.7 A cabin crew member assigned to perform evacuation duties in a commercial air transport helicopter shall occupy the seat provided therefor during take-off and landing or when so directed by the PIC in the interests of aviation safety.

Seating of cabin crew members during flight

127.02.8 During take-off and landing, and whenever deemed necessary by the PIC in the interest of aviation safety, cabin crew members shall be seated at their assigned stations or seats.

Flight time and duty periods

- **127.02.9** (1) The operator of a commercial air transport helicopter shall
 - (a) establish a scheme for the regulation of flight time and duty periods for each flight crew member;
 - (b) include the scheme referred to in paragraph (a) in the operations manual referred to in regulation 127.04.2;
 - (c) ensure that each flight crew member complies with the provisions of the scheme referred to in paragraph (a);
 - (d) not cause or permit any flight crew member to fly in the helicopter if such operator knows or has been made aware that such flight crew member
 - (i) will exceed the flight time and duty periods referred to in sub- regulation (1)(a) while on flight duty; or
 - (ii) is suffering from or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue which may endanger the safety of the helicopter or its flight crew members and passengers; and
 - (e) not schedule a flight crew member for active flight duty for a period exceeding eight consecutive hours during any given flight time and duty period unless authorised in the scheme referred to in paragraph (a).
- (2) Except with the approval of the Director, the flight time and duty scheme of the operator shall not be in conflict with the provisions of regulation 91.02.3(1)(f).
- (3) The provisions to be included in a flight time and duty scheme referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 127.

SUBPART 3: TRAINING AND CHECKING

Division One: General Provisions

Training of flight crew members

127.03.1 (1) The operator of a commercial air transport helicopter shall establish and maintain a ground and flight training programme for flight crew members in his or her employ.

- (2) The operator shall ensure that
 - (a) each flight crew member receives training in accordance with this subpart and the appropriate syllabus as prescribed in Document SA-CATS 127;
 - (b) the training shall only be provided by the holder of an ATO approval issued in terms of Part 141; and
 - (c) each flight crew member passes a written examination with regard to all the subjects of the training syllabus referred to in paragraph (a).
- (3) The provisions of this subpart shall apply in respect of full-time as well as part-time employed flight crew members.

Initial training of flight crew members

127.03.2 A flight crew member employed by the operator of a commercial air transport helicopter shall have successfully completed the initial training and skill tests as prescribed in Part 61 or 64, as the case may be.

Division Two: Pilot Training

Conversion training

- 127.03.3 (1) The operator of a commercial air transport helicopter shall ensure that
 - (a) a cockpit crew member completes a type conversion course in accordance with the applicable requirements prescribed in Part 61 when changing from one type of helicopter to another type or class for which a new type or class rating is required;
 - (b) a cockpit crew member completes an operator's type conversion course before commencing unsupervised operational flying
 - (i) when changing to a helicopter for which a new type or class rating is required; or
 - (ii) when employed by such operator;
 - (c) type conversion training is conducted by a competent person in accordance with the detailed course syllabus included in the operations manual referred to in regulation 127.04.2, and as prescribed in Document SA-CATS 127;
 - (d) the amount of training required by the operator's type conversion course is determined after due note has been taken of the cockpit crew member's previous training as recorded in the training records referred to in regulation 127.04.5;
 - (e) the minimum standards of qualification and experience required of cockpit crew members before undertaking type conversion training are specified in the operations manual referred to in regulation 127.04.2;

- (f) each cockpit crew member undergoes the checks prescribed in regulation 127.03.7(2) and the training and checks prescribed in regulation 127.03.7(6) before commencing operational flying under supervision;
- (g) upon completion of operational flying under supervision, the check prescribed in regulation 127.03.7(4) is undertaken; and
- (h) in the case of multi-crew operations, cockpit crew resource management training as prescribed in Document SA-CATS 127 is incorporated in the conversion course.
- (2) In the case of changing helicopter type or class, the check prescribed in regulation 127.03.7(2) may be combined with the type or class rating skill test prescribed in Part 61.
- (3) The operator's type conversion course and the type or class rating course prescribed in Part 61, may be combined.
- (4) The operator's type conversion course shall include the items, and shall be conducted in the order as prescribed in Document SA-CATS 127.
- (5) When a cockpit crew member has not previously completed an operator's type conversion course, the operator shall ensure that, in addition to sub-regulation (4), the cockpit crew member undergoes general first aid training and, if applicable, ditching procedures training using the appropriate equipment in water.
- (6) The operator of a commercial air transport helicopter to be operated by a single pilot in terms of regulation 127.02.1(8) or 127.02.1(8A), shall ensure that additional crew training is provided as prescribed in Document SA-CATS 127.

Differences training and familiarisation training

- **127.03.4** (1) The operator of a commercial air transport helicopter shall ensure that a cockpit crew member completes differences training when
 - (a) operating another variant of a helicopter of the same type or another type of the same class currently operated; or
 - (b) a change of equipment or procedures on types or variants currently operated, requires the acquisition of additional knowledge.
- (2) The operator shall ensure that a cockpit crew member completes familiarisation training when
 - (a) operating another helicopter of the same type or variant; or
 - (b) a change of equipment or procedures on types or variants currently operated, requires the acquisition of additional knowledge.
- (3) The operator shall specify in the operations manual referred to in regulation 127.04.2 when differences training or familiarisation training is required.

Upgrading to PIC

127.03.5 (1) The operator of a commercial air transport helicopter shall ensure that, for an upgrade to PIC from co-pilot, and for a pilot joining as PIC –

- (a) a minimum level of experience is specified in the operations manual referred to in regulation 127.04.2; and
- (b) if multi-crew operations are contemplated, the co-pilot or pilot, as the case may be, completes an appropriate command course.
- (2) The command course referred to in sub-regulation (1)(b) shall be specified in the operations manual referred to in regulation 127.04.2, and shall include
 - (a) if an approved flight simulator is available, training in such simulator, including operational flying training, or flying training in the helicopter;
 - (b) an operator proficiency check operating as PIC;
 - (c) PIC responsibilities;
 - (d) operational in-command training under supervision: Provided that a minimum of 10 sectors is required for pilots already qualified on the helicopter type;
 - (e) completion of a PIC operational check prescribed in regulation 127.03.7(4);
 - (f) in the case of scheduled public air transport service operations, the recency, route and heliport qualifications prescribed in regulation 127.02.3; and
 - (g) if multi-crew operations are contemplated, cockpit crew resource management training as prescribed in Document SA-CATS 127.

Pilot-in-command holding commercial pilot licence

127.03.6 The operator of a commercial air transport helicopter shall ensure that –

- (a) a holder of a CPL (helicopter) does not operate as a PIC of a helicopter certificated in the flight manual referred to in regulation 91.03.2 for single-pilot operations unless
 - (i) when conducting passenger carrying operations under VFR outside a radius of 50 nautical miles from a heliport of departure, the pilot has a minimum of 300 hours total flight time on helicopter or holds a valid instrument rating; or
 - (ii) when operating under IFR, the pilot has a minimum of 400 hours total flight time on helicopters which includes 200 hours as PIC of which 100 hours have been under IFR: Provided that the 200 hours as PIC may be substituted by hours operating as co-pilot on the basis of two hours as co-pilot is equivalent to one hour as PIC: Provided further that these hours are gained within an established multipilot flight crew system prescribed in the operations manual referred to in regulation 127.04.2;
- (b) in addition to paragraph (a)(ii), when operating under IFR as a single pilot, the requirements prescribed in regulation 127.02.1(8) are complied with;
- (c) in multi-pilot flight crew operations, and prior to operating as PIC the command course prescribed in regulation 127.03.5(1)(b) is completed.

Recurrent training and checking

127.03.7 (1) The operator of a commercial air transport helicopter shall ensure that –

- (a) each cockpit crew member undergoes recurrent training and checking and that all such training and checking is relevant to the type or variant of helicopter on which the cockpit crew member is licensed to operate;
- (b) a recurrent training and checking programme is included in the operations manual referred to in regulation 127.04.2;
- (c) recurrent training is conducted by -

- (i) a competent person, in the case of ground and refresher training;
- (ii) a type rated instructed, in the case of helicopter or flight simulator training;
- (iii) competent personnel in the case of emergency and safety equipment training and checking; or
- (iv) competent personnel, in the case of cockpit crew resource management training;
- (d) recurrent checking is conducted by -
 - (i) an examiner in the case of operator proficiency checks; and
 - (ii) a PIC designated by the operator in the case of operational checks; and
- (e) each cockpit crew member undergoes operator proficiency checks every six calendar months as part of a normal cockpit crew complement.
- (2) The operator shall ensure that, in the case of an operator proficiency check referred to in sub-regulation (1)(e)
 - (a) each cockpit crew member undergoes such checks to demonstrate his or her competence in carrying out normal, abnormal and emergency procedures; and
 - (b) such check is conducted without external visual references when the cockpit crew member will be required to operate under IFR.
- (3) Upon successful completion of the operator proficiency check referred to in sub-regulation (1)(e), the operator shall issue a certificate of competency to the cockpit crew member concerned, which certificate shall be valid for a period of six calendar months calculated from the last day of the calendar month in which such certificate is issued.
- (4) The operator shall ensure that, in the case of an operational check, each cockpit crew member undergoes the operational check on the helicopter to demonstrate his or her competence in carrying out normal operations specified in the operations manual referred to in regulation 127.04.2.
- (5) Upon successful completion of the operational check referred to in sub-regulation (4), the operator shall issue a certificate of competency to the cockpit crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.
- (6) The operator shall ensure that, in the case of emergency and safety equipment training and checking, each cockpit crew member undergoes training and checking on the location and use of all emergency and safety equipment carried.
- (7) Upon successful completion of the emergency and safety equipment check referred to in sub-regulation (6), the operator shall issue a certificate of competency to the cockpit crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.
- (8) The operator shall ensure that, in the case of cockpit crew resource management training, each cockpit crew member undergoes such training as part of the recurrent training as prescribed in Document SA-CATS 127.
- (9) The operator shall ensure that, in the case of ground and refresher training, each cockpit crew member undergoes such training every 12 calendar months.

Pilot qualification to operate in either pilot's seat

- **127.03.8** The operator of a commercial air transport helicopter shall ensure that
 - (a) a pilot to be assigned to operate in either pilot's seat, completes the appropriate training and checking; and
 - (b) the training and checking programme is
 - (i) specified in the operations manual referred to in regulation 127.04.2; and
 - (ii) is undertaken in accordance with the appropriate syllabus as prescribed in Document SA-CATS 127.

Advanced qualification programme

- **127.03.9** (1) The period of validity for the training referred to in regulation 127.03.7 may be extended if the Director has approved an advanced qualification programme established by the operator.
- (2) The advanced qualification programme shall contain training and checking which establishes and maintains a proficiency that is not less than the proficiency referred to in regulations 127.03.3(4), 127.03.4, 127.03.5, 127.03.6 and 127.03.7.

Division Three: Training of Cabin Crew Members

Initial training

127.03.10 The operator of a commercial air transport helicopter shall ensure that each cabin crew member successfully completed the initial training as prescribed in Part 64, before undertaking helicopter type and differences training.

Type and differences training

- **127.03.11** (1) The operator of a commercial air transport helicopter shall ensure that each cabin crew member has completed the type training or differences training, specified in the operations manual referred to in regulation 127.04.2 before undertaking duties assigned to them.
- (2) A cabin crew member shall complete a type training course when
 - (a) employed by the operator as a cabin crew member; or
 - (b) assigned to act as a cabin crew member on another helicopter type.
- (3) A cabin crew member shall complete a differences training course when acting as a cabin crew member
 - (a) in a variant of the current helicopter type; or
 - (b) in a helicopter type with equipment, equipment location, or safety procedures which differ from the current helicopter type or variant.

- (4) The operator shall determine the content of the type or differences training course taking account of the cabin crew member's previous training as recorded in the cabin crew member's training records prescribed in regulation 127.04.5.
- (5) The operator shall ensure that
 - (a) type training is conducted in a structured manner, in accordance with the requirements as prescribed in Document SA-CATS 127;
 - (b) differences training is conducted in a structured manner; and
 - (c) type training and differences training includes the use of all emergency and survival equipment and all emergency procedures applicable to the helicopter type or variant and involves training and practice on either a representative training device or on the actual helicopter.

Familiarisation flights

127.03.12 The operator of a commercial air transport helicopter shall ensure that upon completion of type training or differences training, each cabin crew member undertakes familiarisation flights before acting as one of the minimum number of cabin crew prescribed in regulation 127.02.4.

Recurrent training

- **127.03.13** (1) The operator of a commercial air transport helicopter shall ensure that each cabin crew member undergoes recurrent training, covering the actions assigned to each cabin crew member in evacuation and other appropriate normal and emergency procedures and drills relevant to the helicopter type or variant, in accordance with the requirements as prescribed in Document SA-CATS 127.
- (2) The operator shall ensure that the recurrent training and checking programme includes the theoretical and practical instruction, as well as individual practice, as prescribed in Document SA-CATS 127.
- (3) Upon successful completion of the recurrent training and checking, the operator shall issue a certificate of competency to the cabin crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.

Refresher training

- **127.03.14** (1) The operator of a commercial air transport helicopter shall ensure that each cabin crew member who has been absent from all flying duties for more than six months completes the refresher training specified in the operations manual referred to in regulation 127.04.2, as prescribed in Document SA-CATS 127.
- (2) The operator shall ensure that a cabin crew member who has not been absent from all flying duties, but has not acted as a cabin crew member on a particular helicopter type for a period of six months, completes
 - (a) refresher training in such helicopter type; or

(b) two familiarisation sectors during commercial operations in such helicopter type, before undertaking duties on such helicopter type.

Checking

- **127.03.15** (1) The operator of a commercial air transport helicopter shall ensure that during or following completion of the training prescribed in regulations 127.03.10, 127.03.11 and 127.03.13, each cabin crew member undergoes a check covering the training received in order to verify his or her proficiency in carrying out safety and emergency duties.
- (2) The checks referred to in sub-regulation (1) shall be performed by competent personnel.
- (3) The operator shall ensure that each cabin crew member undergoes checks of the items for initial, helicopter type, differences and recurrent training, as prescribed in Document SA-CATS 127.

Division Four: Training of Other Crew Members

Training

- **127.03.16** The operator of a commercial air transport helicopter shall provide an initial, recurrent and refresher training course for any
 - (a) load master;
 - (b) winch operator; and
 - (c) any other crew member essential to safe operations,

if the operator has such operations personnel in his or her employ.

SUBPART 4: DOCUMENTATION AND RECORDS

Documents to be retained on ground

- **127.04.1** (1) The operator of a commercial air transport helicopter engaged in a scheduled public air transport service operation, shall ensure that
 - (a) copies of the relevant parts of the flight folio;
 - (b) the load and trim sheet:
 - (c) the passenger list or cargo manifest;
 - (d) the special loads notification, if applicable; and
- (e) a general declaration in the case of a helicopter engaged in international flights. are retained in a safe place at the first point of departure in respect of each flight undertaken by the helicopter.
- (2) The documents referred to in sub-regulation (1) shall be retained for a period of at least 90 days.

Operations manual

127.04.2 (1) The operator of a commercial air transport helicopter shall draw up an operations manual containing all information required under this Part and setting out the manner in which

such operator will operate the air service for which such operator is licensed in terms of the International Air Services Act, 1993, or the Air Services Licensing Act, 1990, as the case may be.

- (2) The operator shall submit the operations manual in duplicate to the Director for approval.
- (3) If the Director is satisfied that the operator
 - (a) will comply with the provisions of regulation 127.06.7; and
 - (b) will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, or the Air Services Licensing Act, 1990,

the Director shall certify in writing on both copies of the operations manual that such manual has been approved, and shall return one copy of the approved manual to the operator.

- (4) The operator shall submit an amendment to an approved operations manual in duplicate to the Director for approval.
- (5) If the Director is satisfied that the operator will comply with the provisions of sub-regulation (3)(a) and (b), the Director shall certify in writing on both copies of the amendment to the operations manual that such amendment has been approved, and shall return one copy of the approved amendment to the operator.
- (6) The operator shall at all times operate the commercial air transport helicopter in accordance with the approved operations manual or an approved amendment thereto.
- (7) The operator shall
 - (a) ensure that all operations personnel are able to understand the technical language used in those sections of the operations manual which pertain to their duties;
 - (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight, are easily accessible to the flight crew members on board;
 - (c) make the operations manual available for the use and guidance of operations personnel;
 - (d) provide the flight crew members with their own personal copy of the sections of the operations manual which are relevant to the duties assigned to them;
 - (e) keep the operations manual up to date; and
 - (f) keep the operations manual in a safe place.
- (8) The contents of the operations manual shall not contravene the conditions contained in the operating certificate issued to the operator in terms of regulation 127.06.3.
- (9) The structure and contents of the operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 127.

Flight time and duty period records

- **127.04.3** (1) The operator of a commercial air transport helicopter shall
 - (a) maintain current flight time and duty period records of all flight crew members in such operator's employ; and

- (b) retain the flight time and duty period records for a period of 15 calendar months calculated from the date of the last flight of each flight crew member.
- (2) A flight crew member in the part-time employ of an operator shall maintain his or her own flight time and duty period records and shall provide copies thereof to the operator to enable such operator to ensure that such flight crew member does not exceed the limits prescribed in the flight time and duty scheme of the operator referred to in regulation 127.02.9.

Records of emergency and survival equipment

- **127.04.4** (1) The operator of a commercial air transport helicopter shall compile a list of all the survival and emergency equipment to be carried in a commercial air transport helicopter and shall have such list available at all times for immediate communication to rescue coordination centres.
- (2) The survival and emergency equipment list shall be included in the operations manual referred to in regulation 127.04.2.
- (3) The format and minimum information to be included in the survival and emergency equipment list shall be as prescribed in Document SA-CATS 127.

Flight crew member training records

- **127.04.5** (1) The operator of a commercial air transport helicopter shall maintain the records of all training and proficiency checks undertaken by the flight crew members in such operator's employ, and such records shall incorporate certificates indicating the successful completion of such training and proficiency checks.
- (2) The operator shall retain the record of each cockpit crew member for a period of at least three years and the record of each cabin crew member for a period of at least 12 months from the date on which the flight crew member concerned has left the employ of such operator.
- (3) The certificates referred to in sub-regulation (1) shall be made available by the operator to the flight crew member concerned on request.

Load and trim sheet

- **127.04.6** (1) The operator of a commercial air transport helicopter with a maximum approved passenger seating configuration of more than nine seats shall ensure that no flight is undertaken by the helicopter unless the person superintending the loading of such helicopter has completed and certified a load and trim sheet.
- (2) A load and trim sheet shall be completed in duplicate and one copy shall be carried in the helicopter and, one copy shall be retained in accordance with the provisions of regulation 127.04.1.
- (3) The load and trim sheet shall be retained by the operator for a period of at least 90 days calculated from the date on which the flight was undertaken.

(4) The minimum contents of a load and trim sheet shall be as prescribed in Document SA-CATS 127.

Helicopter checklist

127.04.7 The operator of a commercial air transport helicopter, shall, in addition to the aircraft checklist referred to in regulation 91.03.3, compile and make available to the flight crew and other personnel members in such operator's employ, a checklist of the procedures to be followed by such flight crew and personnel members when searching for concealed weapons, explosives or other dangerous devices.

SUBPART 5: HELICOPTER INSTRUMENTS AND EQUIPMENT

Approval of instruments and equipment

- **127.05.1** (1) The operator of a commercial air transport helicopter shall ensure that a flight does not commence unless the instruments and equipment required under this Subpart, or otherwise installed on the helicopter, are
 - (a) subject to the provisions of sub-regulation (2), approved and installed in accordance with the requirements, including operational and airworthiness requirements, applicable to such instruments and equipment; and
 - (b) in a condition for safe operation of the kind being conducted, except as provided for in the MEL.
- (2) The operator shall not be required to obtain approval for the
 - (a) fused referred to in regulation 91.04.2;
 - (b) intrinsically safe electric torches referred to in regulation 91.04.3(1)(d);
 - (c) accurate time piece referred to in regulations 91.04.4 and 91.04.5:
 - (d) first aid equipment referred to in regulation 91.04.16;
 - (e) megaphones referred to in regulation 91.04.24;
 - (f) survival equipment referred to in regulation 91.04.29; and
 - (g) sea anchors and equipment for the mooring, anchoring or manoeuvring of amphibious helicopters on water, referred to regulation 91.04.30.

Flight, navigation and associated equipment for helicopters operated under VFR

- **127.05.2** (1) The operator of a commercial air transport helicopter shall not operate the helicopter in accordance with VFR, unless such helicopter is equipped with
 - (a) a magnetic compass;
 - (b) an accurate time-piece indicating the time in hours, minutes and seconds;
 - (c) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (d) an airspeed indicator;
 - (e) a vertical speed indicator;
 - (f) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
 - (g) an attitude indicator:

- (h) a stabilised direction indicator; and
- (i) a means of indicating in the cockpit the outside air temperature in degrees Celsius; and
- (j) a chart holder in an easily readable position which can be illuminated. if to be operated by night.

Provided that a helicopter with a MCM of 2 730 kilograms or less, does not have to comply with the provisions of paragraph (g) and (h).

- (2) If two pilots are required to operate a commercial air transport helicopter, the second pilot's station shall be equipped with
 - (a) a sensitive pressure altimeter with a subscale setting calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (b) an airspeed indicator;
 - (c) a vertical speed indicator;
 - (d) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
 - (e) an attitude indicator; and
 - (f) a stabilised director indicator.

Provided that a helicopter with a MCM of 2 730 kilograms or less, does not have to comply with the provisions of paragraph (e) and (f).

- (3) A commercial air transport helicopter being operated by night in accordance with VFR
 - (a) outside a radius of 15 nautical miles from its point of departure; or
 - (b) if on a cross-country flight, for longer than 20 minutes; or
 - (c) over water at a distance from land corresponding to more than 10 minutes at normal cruise speed;

shall be equipped with a radio altimeter with an audio warning operating below a preset height and a visual warning capable of operating at a height selectable by the pilot.

Flight, navigation and associated equipment for helicopters operated under IFR

- **127.05.3** (1) The operator of a commercial air transport helicopter shall not operate the helicopter in accordance with IFR, unless such helicopter is equipped with
 - (a) a magnetic compass;
 - (b) an accurate time-piece indicating the time in hours, minutes and seconds;
 - (c) two sensitive pressure altimeters with subscale settings, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (d) in the case of a helicopter used in a scheduled or non-scheduled public air transport service operation and having a MCM exceeding 5 700 kilograms, a radio altimeter with an audio warning operating below a preset height and a visual warning capable of operating at a height selectable by the pilot;
 - (e) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing, including a warning indicator of pitot heater failure:
 - (f) a vertical-speed indicator;
 - (g) a turn-and-slip indicator or in lieu thereof, an additional attitude indicator powered by a power source separate from that of the main attitude indicator;
 - (h) an attitude indicator;
 - (i) a single standby attitude indicator, capable of being used from either pilot's station, which –

- (i) is powered continuously during normal operation and, after a total failure of the normal electrical generating system is powered from a source independent of the normal electrical generating system;
- (ii) provides reliable operation for a minimum of 30 minutes after total failure of the normal electrical generating system, taking into account other loads on the emergency power supply and operational procedures;
- (iii) operates independently of any other attitude indicating system;
- (iv) is operative automatically after total failure of the normal electrical generating system; and
- (v) is appropriately illuminated during all phases of operation:

Provided that if the standby attitude instrument system is capable of being used through flight attitudes of 360° of pitch and roll, the turn-and-slip indicators may be replaced by slip indicators;

- (j) a stabilised direction indicator;
- (k) a means of indicating in the cockpit the outside air temperature in degrees Celsius;
- (I) an alternate source of static pressure for the altimeter and the airspeed and vertical speed indicators; and
- (m) a chart holder in an easily readable position which can be illuminated, if to be operated by night.
- (2) The operator of a commercial air transport helicopter shall not operate the helicopter in IMC while carrying passengers, unless such helicopter is equipped with -
 - (a) a power-failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source;
 - (b) two independent sources of energy (with means of selecting either), of which at least one is an engine-driven pump or generator, which are both able to drive all required gyroscopic instruments powered by, or to be powered by, that particular source, and installed in such a manner that failure of one instrument or source does not interfere with the energy supply, to the remaining instruments or the other energy source except where the rate-of-turn indicator of a single-engine helicopter involved in all-cargo operations only, has a source of energy separate from the bank and pitch and direction indicators. For the purpose of this sub-regulation, each engine-driven source of energy of a multi-engine helicopter must be on a different engine:
 - (c) if a multi-engine helicopter, at least two generators or alternators of which any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the helicopter (both units may be mounted on the main rotor drive train); or
 - (d) if a single-engine helicopter:
 - (i) two independent electrical power-generating sources, each of which is able to supply all probable combinations of continuous in-flight electrical loads for required instruments or equipment; or
 - (ii) in addition to the primary electrical power-generating source, a stand-by battery or an alternate source of electrical power that is capable of supplying 150% of the electrical loads of all required instruments and equipment necessary for safe emergency operation of the helicopter for at least 30 minutes;

<u>Note:</u> For the purpose of subparagraph (d)(i), a continuous in-flight electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.

- (e) either airborne weather radar equipment or other equipment, approved by the Director, capable of detecting thunderstorms and other potentially hazardous weather conditions.
- (3) If two pilots are required to operate a commercial air transport helicopter the second pilot's station shall be equipped with
 - (a) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight, which may be one of the two altimeters required under sub-regulation (1)(c);
 - (b) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunction due to either condensation or icing including a warning indicator of pitot heater failure:
 - (c) a vertical-speed indicator;
 - (d) a turn-and-slip indicator, or in lieu thereof, an additional altitude indicator powered by a power source separate from that of the main altitude indicator;
 - (e) an altitude indicator; and
 - (f) a stabilised direction indicator.
- (4) In complying with the provisions of sub-regulation (1)(i) it shall be clearly evident to the cockpit crew members when such standby altitude indicator is being operated by emergency power.
- (5) Where the standby altitude indicator referred to in sub-regulation (1)(i) has its own dedicated power supply, there shall be an associated indicator, either on the instrument or instrument panel, when such power supply is in use.
- (6) When a commercial air transport helicopter is operated with a single pilot in terms of sub-regulation 127.02.1(8) while carrying passengers at night or in IMC, the helicopter shall furthermore be equipped with
 - (a) IFR-approved RNAV equipment that provides immediate identification and heading to the nearest suitable diversion:
 - (b) an approved stability augmentation or automatic flight control management system; and
 - (c) if the helicopter is fitted with a turbo engine
 - (i) an auto-ignition system or use of continuous ignition during take-off, landing and flight during heavy precipitation; and
 - (ii) a manual throttle that bypasses the governing section of the fuel control unit, and permits continued unrestricted operation of the engine in the event of a fuel control unit failure.

Airborne weather radar equipment

127.05.4 The operator of a commercial air transport helicopter with a maximum approved passenger seating configuration of more than nine seats on a scheduled or non-scheduled public air transport service operation, shall not operate the helicopter unless such helicopter is equipped with airborne weather radar equipment whenever such helicopter is being operated by night or in IMC in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radars, may be expected to exist along the route.

Cockpit crew interphone system

127.05.5 The operator of a commercial air transport helicopter on which more than one cockpit crew member is required, shall not operate the helicopter unless such helicopter is equipped

with a cockpit crew interphone system, including headsets and microphones, not of a hand-held type, for use by all cockpit crew members.

Flight crew interphone system

- **127.05.6** (1) The operator of a commercial air transport helicopter with a maximum approved passenger seating configuration of more than 19 seats, shall not operate the helicopter unless such helicopter is equipped with a flight crew interphone system.
- (2) The flight crew interphone system shall
 - (a) operate independently of the public address system referred to in regulation 127.05.7 except for handsets, microphones, selector switches and signalling devices;
 - (b) provide a means of two-way communication between the cockpit and each passenger compartment;
 - (c) be readily accessible for use from each of the required cockpit crew stations in the cockpit;
 - (d) be readily accessible for use at the required cabin crew stations close to each separate or pair of floor level emergency exits;
 - (e) have an alerting system incorporating aural or visual signals for use by cockpit crew members to alert the cabin crew and for use by cabin crew to alert the cockpit crew;
 - (f) have a means of the recipient of a call to determine whether it is a normal call or an emergency call; and
 - (g) provide on the ground a means of two-way communication between ground personnel and at least two cockpit crew members, if the design of the helicopter requires such interphone system.

Public address system

- **127.05.7** (1) The operator of a commercial air transport helicopter with a maximum approved passenger seating configuration of more than nine seats, shall not operate the helicopter unless such helicopter is equipped with a public address system.
- (2) The public address system shall
 - (a) operate independently of the interphone systems referred to in regulations 127.05.5 and 127.05.6, except for handsets, microphones, selector switches and signalling devices;
 - (b) be readily accessible for immediate use from each required cockpit crew member station;
 - (c) be readily accessible for use from at least one cabin crew station in the cabin;
 - (d) in the case of a public address system microphone intended for cabin crew use, be positioned adjacent to a cabin crew seat located near each required floor level emergency exit in the passenger compartment:
 - (e) be capable of operation within 10 seconds by a cabin crew member at each of those stations in the compartment from which the use of such public address system is accessible;
 - (f) be audible and intelligible in all phases of flight at all passenger seats, toilets and cabin crew seats and stations;
 - (g) be powered continuously during normal operation; and
 - (h) provide reliable operation for at least 10 minutes, following a total failure of the normal electrical generating system.

Survival suits

- **127.05.8** The operator of a commercial air transport helicopter shall not operate the helicopter beyond 10 minutes flying time at normal cruising speed from land when the weather report or forecasts available to the PIC indicate that
 - (a) the water temperature will be less than 10°C during the flight; or
 - (b) the estimated rescue time exceeds the calculated survival time;

unless each person on board is wearing a survival suit: Provided that this provision shall not apply where an operator received the prior written approval of the Director to operate without such survival suits.

SUBPART 6: OPERATING CERTIFICATE

Operating certificate

- **127.06.1** The operator of a commercial air transport helicopter shall not operate the helicopter unless such operator is the holder of, and in compliance with, a valid
 - (a) licence issued in terms of the Air Services Licensing Act, 1990, or the International Air Services Act, 1993; and
 - (b) operating certificate issued in terms of regulation 127.06.3.
 - (c) operations specification as an attachment to the operating certificate which addresses at least the following operational and maintenance areas:
 - (i) Part A General provisions
 - (ii) Part B En-route authorisations and limitations
 - (iii) Part C Aerodrome authorisations and limitations
 - (iv) Part D Maintenance
 - (v) Part E Mass and balance
 - (vi) Part F Interchange of equipment operations
 - (vii) Part G Aircraft leasing operations.

Application for operating certificate and operations specifications

127.06.2 An application for an operating certificate and operations specification shall be made to the Director in a form and manner as prescribed in Document SA-CATS 127 and shall be accompanied by the appropriate fee as prescribed in Part 187.

Adjudication of application for operating certificate

- **127.06.3** (1) In considering an application referred to in regulation 127.06.2 the Director may conduct the investigation he or she deems necessary.
- (2) An application shall be granted and the operating certificate issued if the Director is satisfied that
 - (a) the applicant will comply with the provisions of regulation 127.06.7; and

- (b) the applicant will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, 1993, or the Air Service Licensing Act, 1990.
- (3) If the Director is not so satisfied, he or she shall notify the operator thereof, stating the reasons in the notification, and grant the operator the opportunity to rectify or supplement any defect within the period determined by the Director, after which period the Director shall grant or refuse the application concerned.
- (4) An operating certificate shall be issued on the appropriate form as prescribed in Document SA-CATS 127, under such conditions which the Director may determine.

Period of validity of operating certificate

- **127.06.4** (1) An operating certificate shall be valid for such period as may be determined by the Director: Provided that such period shall not exceed a period of 12 months from the date of issuing thereof.
- (2) If the holder of an operating certificate applies, at least 30 (thirty) days prior to the expiry thereof for a renewal of the operating certificate, the operating certificate shall, notwithstanding the provisions of sub-regulation (1), remain in force until such holder is notified by the Director of the result of the application for its renewal.

Safety inspections and audits

- **127.06.5** (1) An applicant for the issuing of an operating certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of an application made in terms of regulation 127.06.2.
- (2) The holder of an operating certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Duties of holder of operating certificate

127.06.6 The holder of an operating certificate shall –

- (a) notify the Director in the manner as prescribed in Document SA-CATS 127, before any change is effected to the particulars on the operating certificate;
- (b) keep the operating certificate in a safe place and produce such operating certificate to an authorised officer, inspector or authorised person for inspection if so requested by such officer, inspector or person; and
- (c) not commence or continue with the air service concerned unless such holder is the holder of a valid operating certificate.

Register of operating certificates

127.06.7 (1) The Director shall maintain a register of all operating certificates issued in terms of these regulations.

- (2) The register shall contain the following particulars:
 - (a) the full name and, if any, the trade name of the holder of the operating certificate;
 - (b) the postal address of the holder of the operating certificate;
 - (c) the number of the operating certificate issued to the holder;
 - (d) particulars of the type of air service for which the operating certificate was issued;
 - (e) particulars of the category of helicopter for which the operating certificate was issued; and
 - (f) the date on which the operating certificate was issued.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within 30 days from the date on which the operating certificate is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 7: FLIGHT OPERATIONS

Routes and areas of operation

- **127.07.1** (1) The operator of a commercial air transport helicopter shall ensure that scheduled public air transport service operations are only conducted along such routes for which
 - (a) ground facilities and services, including meteorological services, are provided which are adequate for the planned operation;
 - (b) appropriate maps and charts are available; and
 - (c) where a single-engine helicopter is used, surfaces are available which permit a safe forced landing to be executed.
- (2) The operator shall ensure that operations are only conducted within such areas and along such routes for which approval or authorisation has been obtained, where required, from the appropriate authority concerned.
- (3) The operator shall ensure that
 - (a) the performance of the helicopter intended to be used, is adequate to comply with minimum flight altitude requirements; and
 - (b) the equipment of the helicopter intended to be used, complies with the minimum requirements for the planned operation.

Establishment of procedures

127.07.2 The operator of a commercial air transport helicopter shall –

- (a) establish procedures and instructions, for each helicopter type, containing ground personnel and flight crew members' duties for all types of operations on the ground and in flight;
- (b) establish a checklist system to be used by cockpit crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that the operating procedures in the operations manual referred to in regulation 127.04.2, are followed; and

(c) ensure that flight crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the helicopter.

Operations control and supervision

127.07.3 The operator of a commercial air transport helicopter shall exercise operational control and establish and maintain an approved method of supervision of flight operations.

Competence of operations personnel

127.07.4 The operator of a commercial air transport helicopter shall ensure that all personnel assigned to, or directly involved in, ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

Use of air traffic services

127.07.5 The operator of a commercial air transport helicopter shall ensure that air traffic services are used for all flights whenever available.

Minimum flight altitudes

- **127.07.6** (1) The operator of a commercial air transport helicopter shall establish minimum flight altitudes for all operations carried out in accordance with IFR and all scheduled public air transport service operations, as well as the methods to determine such minimum flight altitudes for all route segments to be flown which provide the required terrain clearance, taking into account the performance operating limitations referred to in subpart 8.
- (2) The operator shall take into account, when establishing minimum flight altitudes
 - (a) the accuracy with which the position of the helicopter can be determined:
 - (b) the possible inaccuracies in the indications of the altimeters used;
 - (c) the characteristics of the terrain along the routes or in the areas where operations are to be conducted:
 - (d) the probability of encountering unfavourable meteorological conditions; and
 - (e) possible inaccuracies in aeronautical charts.
- (3) In complying with the provisions of sub-regulation (2) the operator shall consider
 - (a) corrections for temperature and pressure variations from standard values:
 - (b) the air traffic control requirements; and
 - (c) any contingencies which may occur along the planned route.

Heliport operating minima

127.07.7 (1) The operator of a commercial air transport helicopter to be used under IMC shall establish heliport operating minima in accordance with the provisions of sub-regulations (2), (3) and (4) and in conjunction with the instrument approach and landing charts for each heliport and aerodrome intended to be used either as destination or alternate heliport.

- (2) The operator shall establish heliport operating minima for each heliport planned to be used, which shall not be lower than the values as prescribed in Document SA-CATS 91.
- (3) The method of determining heliport operating minima shall be approved by the Director.
- (4) The heliport operating minima established by the operator shall not be lower than any heliport operating minima established by the appropriate authority of the State in which the heliport is located: Provided that if such appropriate authority approves such lower heliport operating minima established by the operator, the lower heliport operating minima shall apply.

Offshore operations

- **127.07.8** (1) The operator of a commercial air transport helicopter shall ensure that, in the case of flights over water
 - (a) radio contact is maintained with his or her shore base or other flight-monitoring station:
 - (b) a full complement of flight crew to operate the helicopter and its safety equipment under normal emergency conditions; and
 - (c) the helicopter is equipped for flights over water in terms of these Regulations.
- (2) In the case of a single-reciprocating-engine helicopter
 - (a) flights shall be limited to five nautical miles seaward from shore base;
 - (b) no flights shall be undertaken except by day and under VMC, and no flight shall be commenced which cannot be completed at least one hour before last light:
 - (c) a back-up helicopter or rescue craft, which is suitably manned and equipped for air and sea rescue operations and which is fully operational, shall be on stand-by at the shore base with survival and rescue equipment on board, adequate for the rescue of the passengers and flight crew of the helicopter for which it is on stand-by.
- (3) In the case of a single-turbine-engine helicopter
 - (a) flights shall be limited to 50 nautical miles seaward from shore base:
 - (b) no flights shall be undertaken except by day and under VMC;
 - (c) for flights over water from five up to 15 nautical miles sufficient survival dinghies are carried in such a manner that they will be instantly accessible at the time of ditching; and
 - (d) for flights over water of more than 15 nautical miles, a back-up helicopter or rescue craft referred to in sub-regulation (2)(c), shall be available for search and rescue purposes.
- (4) In the case of multi-engine helicopters the operator shall comply with the provisions of sub-regulation (1) and, in addition, if a flight is to be undertaken by night or under IMC, shall ensure that
 - (a) the helicopter is equipped for IFR operations; and
 - (b) functioning area or on-board navigation aids are available.
- (5) For the purposes of this regulation "shore base" means the site from which the flight over water is commenced or supported.

Smoking in helicopter

127.07.9 No person shall smoke in a South African registered helicopter or any helicopter when such helicopter is used in a scheduled public air transport service operation and has departed from and will be landing within the Republic.

Fuel policy

- **127.07.10** (1) The operator of a commercial air transport helicopter shall establish a fuel policy for the purpose of flight planning and in-flight replanning to ensure that every flight carries sufficient fuel for the planned operation and reserve fuel to cover deviations from the planned operation.
- (2) The operator shall ensure that the planning of a flight is only based upon
 - (a) procedures, tables or graphs which are contained in or derived from the operations manual referred to in regulation 127.04.2, or current helicopter-specific data;
 - (b) the operating conditions under which the flight is to be conducted including
 - (i) realistic helicopter fuel consumption data;
 - (ii) anticipated masses;
 - (iii) expected meteorological conditions; and
 - (iv) ATS procedures and restrictions.
- (3) The operator shall ensure that the calculation of usable fuel required by such helicopter for a flight includes
 - (a) taxi fuel;
 - (b) trip fuel;
 - (c) reserve fuel consisting of
 - (i) contingency fuel as prescribed in Document SA-CATS 127:
 - (ii) alternate fuel, if a destination alternate heliport is required;
 - (iii) final reserve fuel;
 - (iv) additional fuel, if required by the type of operation; and
 - (d) extra fuel, if required by the PIC.
- (4) The operator shall ensure that in-flight replanning procedures for calculating usable fuel required when a flight has to proceed along a route or to a destination heliport other than originally planned includes
 - (a) trip fuel for the remainder of the flight;
 - (b) reserve fuel consisting of -
 - (i) contingency fuel;
 - (ii) alternate fuel, if a destination alternate heliport is required, including selection of the departure heliport as the destination alternate heliport;
 - (iii) final reserve fuel; and
 - (iv) additional fuel, if required by the type of operation; and
 - (c) extra fuel, if required by the PIC.

Fuel and oil supply

127.07.11 The operator of a commercial air transport helicopter shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out.

Instrument approach and departure procedures

127.07.12 The operator of a commercial air transport helicopter may implement instrument approach and departure procedures other than instrument approach and departure procedures referred to in regulation 91.07.12, if required: Provided that such instrument approach and departure procedures have been approved by the Director or the appropriate authority of the State in which the heliport to be used, is located.

Noise abatement procedures

- **127.07.13** (1) The operator of a commercial air transport helicopter shall establish operating procedures for noise abatement.
- (2) Take-off and climb procedures for noise abatement specified by the operator for any one helicopter type shall be the same for all heliports.

Carriage of infants and children

- **127.07.14** (1) The operator of a commercial air transport helicopter shall ensure that an infant is only carried when properly secured with a child restraint device or in the arms or on the lap of an adult passenger or in a skycot: Provided that, in the case of a skycot, the skycot is
 - (a) restrained so as to prevent it from moving under the maximum accelerations to be expected in flight; and
 - (b) fitted with a restraining device so as to ensure that the infant will not be thrown from such skycot under the maximum accelerations to be expected in flight.
- (2) An operator shall ensure that precautions are taken to ensure that, at the times seat belts are required to be worn in flight, the infant carried in the skycot will be secured by a restraining device so that it will not be thrown from such skycot under the maximum accelerations to be expected in flight.
- (3) Infants shall not be seated in front of exits.
- (4) Infants shall not be carried behind a bulkhead unless a child restraint device is used during critical phases of flight and during turbulence.
- (5) Skycots shall not be used during critical phases of flight.
- (6) Skycots shall be positioned in such a way that they do not prevent or hinder the movement of adjacent passengers or block exits.
- (7) When an infant is carried in the arms or on the lap of a passenger, the seat belt, when required to be worn, shall be fastened around the passenger carrying or nursing the infant, but not around the infant.

- (8) When an infant is carried in the arms or on the lap of a passenger the name of the infant shall be bracketed on the passenger list with the name of the person carrying or nursing the infant.
- (9) An infant may be seated in a car-type infant seat, approved for use in a helicopter, which is secured to the helicopter seat.
- (10) A car-type infant seat referred to in sub-regulation (9) shall not be located in the same row or a row directly forward or aft of an emergency exit.

Carriage of passengers with disability

- **127.07.15** (1) The operator of a commercial air transport helicopter shall establish procedures for the carriage of passengers with disability, including identification, seating positions and handling of the passenger in the event of an emergency.
- (2) The operator shall ensure that
 - (a) the PIC of the helicopter is notified when a passenger with a disability is to be carried on board;
 - (b) a passenger with a disability is not seated in the same row or a row directly forward or aft of an emergency exit;
 - (c) individual briefings on emergency procedures are given to a passenger with a disability and his or her able-bodied assistant, appropriate to the needs of such passenger; and
 - (d) the person giving the briefing shall enquire as to the most appropriate manner of assisting the passenger with a disability so as to prevent pain or injury to such passenger.
- (3) In the case of the carriage of a stretcher patient in the helicopter
 - (a) the stretcher shall be secured in such helicopter so as to prevent it from moving under the maximum accelerations likely to be experienced in flight and in an emergency alighting such as ditching;
 - (b) the patient shall be secured by an approved harness to the stretcher or helicopter structure; and
 - (c) an able-bodied assistant shall accompany each stretcher patient.
- (4) A mentally disturbed person shall not be carried in the helicopter unless
 - (a) accompanied by an able-bodied assistant; and
 - (b) a medical certificate has been issued by a medical practitioner certifying such mentally disturbed person's suitability for carriage by air, and confirming that there is no risk of violence from such person.
- (5) The operator shall undertake the carriage of a mentally disturbed person who, according to his or her medical history, may become violent, only after special permission has been obtained from the Director.
- (6) A passenger with a splinted or artificial limb may travel unaccompanied provided he or she is able to assist himself or herself.

- (7) The affected limb or supporting aids of a passenger referred to in sub-regulation (6), shall not obstruct an aisle or any emergency exit or equipment.
- (8) If a passenger with a splinted or artificial limb cannot assist himself or herself, the passenger shall be accompanied by an able-bodied assistant.

Limitations on carriage of infants, children and passengers with disability

- **127.07.16** (1) The maximum number of passengers with a disability, unaccompanied minors, or a combination of such passengers and minors, which may be carried by the operator of a commercial air transport helicopter, is limited to one per unit of 20 passengers capacity or part thereof to a maximum of 10 such persons or minors.
- (2) At least one able-bodied assistant shall be carried for every group of five passengers with a disability or unaccompanied minors, or a part or combination thereof, and such assistant shall be assigned with the responsibility of the safety of such passengers or minors: Provided that the persons with a disability can assist themselves.
- (3) In addition to the provisions of sub-regulation (2), for each one passenger with a disability who cannot assist himself or herself, an able-bodied assistant shall be assigned to solely assist such passenger.
- (4) The operator may establish procedures, other than the procedures referred to in subregulations (1) and (2), for the carriage of infants, children and persons with a disability: Provided that such procedures –
 - (a) do not jeopardise aviation safety; and
 - (b) are approved by the Director.

Carriage of inadmissible passengers, deportees or persons in custody

- **127.07.17** (1) The operator of a commercial air transport helicopter shall establish procedures for the carriage of inadmissible passengers, deportees or persons in custody to ensure the safety of the helicopter and its occupants.
- (2) The PIC of the helicopter shall be notified by the operator prior to departure, of the intended carriage, and the reason for carriage, of any of the persons referred to in sub-regulation (1).
- (3) For the purposes of this regulation, "inadmissible passenger" means any person who is not entitled to board the helicopter and includes those persons who are not in the possession of a valid passenger ticket, passport or visa.

Carry-on baggage

127.07.18 (1) The operator of a commercial air transport helicopter shall establish adequate procedures to ensure that only such baggage is carried onto the helicopter and taken into the passenger cabin as can be adequately and securely stowed.

(2) The minimum requirements for the procedures referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 127.

Securing of passenger cabin and galley

- **127.07.19** (1) Before take-off and landing and whenever deemed necessary in the interests of aviation safety, the PIC of a commercial air transport helicopter shall ensure that
 - (a) all equipment, baggage and loose articles in the cabin of the helicopter, including passenger service items and flight crew members' and passengers' personal effects, are properly secured and stowed so as to avoid the possibility of injury to persons or damage to such helicopter through the movement of such articles caused by in-flight turbulence or by unusual accelerations or manoeuvres; and
 - (b) all aisles, passage ways, exits and escape paths are kept clear of obstructions.
- (2) All solid articles shall be placed in approved stowage areas in the helicopter, at all times whenever the seat belt lights are illuminated or when so directed by the PIC of such helicopter.
- (3) For the purposes of sub-regulation (2), "approved stowage area" means
 - (a) the area under a passenger seat; or
 - (b) a locker, overhead or other, in accordance with the placarded mass limitation of the locker.
- (4) No take-off or landing shall be commenced by the PIC of the helicopter, unless he or she has been informed of the safe condition of the cabin.

Passenger services

- **127.07.20** (1) Except when in use, all items provided for passenger services, including food containers, thermos flasks and servicing trays, shall be carried in their respective stowages and secured against movement likely to cause injury to persons or damage to the helicopter.
- (2) All items referred to in sub-regulation (1) shall be stowed during take-off and landing or during emergency situations, as directed by the PIC of the helicopter.
- (3) Any item which cannot be accommodated in the stowage referred to in sub-regulation (1), shall not be permitted in the cabin of the helicopter.
- (4) The cabin crew members shall complete the securing of the cabin before the approach for landing of the helicopter is commenced, if cabin crew members are carried.
- (5) If passenger services are provided while the helicopter is on the ground, no passenger service equipment shall obstruct the aisles or exits of the helicopter.

Incidents and defects

127.07.21 (1) The operator of a commercial air transport helicopter shall establish adequate inspection and reporting procedures to ensure that defective equipment is reported to the PIC of the helicopter before take-off.

- (2) The procedures referred to in sub-regulation (1) shall be extended to include the reporting to the operator of all incidents or the exceeding of limitations which may occur while the flight crew are embarked on the helicopter and of defective equipment found on board.
- (3) Upon receipt of the reports referred to in sub-regulation (2), the operator shall compile a report and submit such report on a monthly basis to the Director.

SUBPART 8: HELICOPTER PERFORMANCE OPERATING LIMITATIONS

Classification

- **127.08.1** (1) The classification of helicopters for performance limitations purposes is prescribed in regulation 91.09.3.
- (2) The operator of a commercial air transport helicopter shall ensure that
 - (a) a Class 1 helicopter is operated in accordance with the performance operating limitations prescribed in Division One;
 - (b) a Class 2 helicopter is operated in accordance with the performance operating limitations prescribed in Division Two; and
 - (c) a Class 3 helicopter is operated in accordance with the performance operating limitations prescribed in Division Three.
- (3) Where specific design characteristics of a helicopter prevents compliance with the regulations in Division One, Two or Three of this subpart, the operator shall, notwithstanding the provisions of sub-regulation (2), ensure that the helicopter is operated in accordance with such standard that a level of safety equivalent to the level of safety prescribed in the appropriate Division in this subpart is maintained.

General provisions for all classes of helicopters

- 127.08.2 (1) The operator of a commercial air transport helicopter shall ensure that
 - (a) the mass of the helicopter, at the start of the take-off, is not greater than the mass at which the requirements prescribed in the appropriate Division can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds; and
 - (b) the approved performance data contained in this helicopter flight manual referred to in regulation 91.03.2, is used to determine compliance in the appropriate Division.
- (2) When complying with the provisions of sub-regulation (1), the operator shall take account of airframe configuration, environmental conditions and the operation of systems which have an effect on performance, when appropriate.

Division One: Class 1 Helicopter

Take-off

- **127.08.3** (1) The operator of a Class 1 helicopter shall ensure that the take-off mass of the helicopter does not exceed the maximum permitted take-off mass for the pressure altitude and the ambient temperature at the place of departure.
- (2) The take-off mass referred to in sub-regulation (1) shall be such that in the event of the critical power-unit failing
 - (a) at or before the take-off decision point, the helicopter can discontinue the take-off and stop within the rejected take-off area available; or
 - (b) at or past the take-off decision point, the helicopter can continue the take-off and the climb, clearing all obstacles along the flight path by a vertical margin of at least 35 feet until such helicopter can comply with the provisions of regulation 127.08.6.
- (3) For the purposes of sub-regulation (2)(a), "rejected take-off area" means an elevated heliport or helideck.
- (4) When complying with the provisions of sub-regulation (2), account shall be taken of
 - (a) the local pressure altitude;
 - (b) the ambient temperature;
 - (c) the take-off technique to be used; and
 - (d) not more than 50 per cent of the reported head-wind component or, if such data is provided, not less than 150 per cent of the reported tail-wind component: Provided that if approved wind measuring equipment is used, the head-wind component may be factored by 80 per cent.
- (5) The part of the take-off prior to the specified take-off decision point shall be so conducted in sight of the surface that a rejected take-off can be carried out.

Take-off flight path

- **127.08.4** (1) The operator of a Class 1 helicopter shall ensure that the take-off flight path clears all obstacles by a vertical margin of at least 35 feet in VFR and at least 35 feet plus 0.01 in IFR, where DR is the horizontal distance the helicopter has travelled from the end of the take-off distance available.
- (2) An obstacle need not be considered if its lateral margin from the nearest point on the surface below the intended flight path exceeds 30m of 1.5 times the overall length of the helicopter, whichever is the greater, plus
 - (a) 0.15 DR for VFR operations; or
 - (b) 0.30 DR for IFR operations.
- (3) Obstacles may be disregarded if they are situated beyond
 - (a) 7R for day operations, if it is assured that navigation accuracy can be achieved by reference to suitable visual cues during the climb;
 - (b) 10R for night operations, if it is assured that navigation accuracy can be achieved by reference to suitable visual cues during the climb;
 - (c) 300 metres, if the pilot is able to maintain the required navigation accuracy through navigation aids; and
 - (d) 900 metres in all other cases.

- (4) For the purposes of sub-regulation (3), "R" means the rotor radius.
- (5) Where a change of direction of more than 15° is made, vertical obstacle clearance requirements shall be increased by 15 feet from the point at which the turn is initiated: Provided that such turn shall not be initiated before reaching a height of 100 feet above the take-off surface.
- (6) When complying with the provisions of this regulation, account shall be taken of
 - (a) the mass of the helicopter at the commencement of the take-off;
 - (b) the local pressure altitude;
 - (c) the ambient temperature; and
 - (d) not more than 50 per cent of the reported head-wind component or not less than 150 per cent of the reported tail-wind component, unless otherwise approved.

En route with one or more engines inoperative

- **127.08.5** (1) The operator of a Class 1 helicopter shall ensure that, in the event of the critical power unit becoming inoperative at any point in the en route flight path, appropriate to the meteorological conditions expected for the flight, the helicopter can comply with the provisions of sub-regulation (2) or (3) at all points along the route.
- (2) The operator shall ensure that, when it is intended that the flight will be conducted at any time out of sight of the surface, the mass of the helicopter permits a rate of climb of at least 50 feet per minute with one engine inoperative at an altitude of at least 1 000 feet or 2 000 feet in areas of mountainous terrain, above all obstacles along the route within 18.5 km on either side of the intended track: Provided that when it is intended that the flight will be conducted by day, VMC and in sight of the surface, only obstacles within 900 metres on either side of the route need to be considered.
- (3) The operator shall ensure that
 - (a) the flight path permits the helicopter to continue flight from the cruising altitude to a height of 1 000 feet above the heliport where a landing can be made in accordance with regulation 127.08.7;
 - (b) the flight path clears vertically by at least 1 000 feet or 2 000 feet in areas of mountainous terrain, all obstacles along the route within 18.5 km on either side of the intended track;
- (c) the engine is assumed to fail at the most critical point along the route: Provided that when it is intended that the flight will be conducted by day, VMC and in sight of the surface, only obstacles within 900 metres in either side of the route need to be considered.
- (4) Account shall be taken of the effects of winds on the flight path.
- (5) When complying with the provisions of this regulation, the width margins referred to in subregulations (2) and (3) may be reduced to 9.3 kilometres, if the required navigation accuracy can be achieved.

(6) In the event of any two power units becoming inoperative in the case of a helicopter having three or more power units, the helicopter shall be able to continue the flight to a suitable landing site and make a landing thereat.

Approach and landing

- **127.08.7** (1) The operator of a Class 1 helicopter shall ensure that the landing mass of the helicopter at the estimated time of landing does not exceed the maximum landing mass specified for the pressure altitude and the ambient temperature expected for the estimated time of landing at the heliport at which it is intended to land and, when required, at any alternate heliport.
- (2) When determining the landing mass, in the event of the critical power-unit becoming inoperative at any point during the approach and landing phase
 - (a) before the landing decision point, the helicopter shall, at the destination and at any alternate heliport, after clearing all obstacles in the approach path by a margin of 35 feet, be able to land and stop within the landing distance available, or perform a baulked landing and clear all obstacles in the flight path by a margin of 35 feet until the helicopter has reached safe take-off speed with a positive rate of climb; or
 - (b) at or after the landing decision point, the helicopter shall, at the destination and at any alternate heliport, after clearing all obstacles in the approach path by a margin of 35 feet, be able to land and stop within the landing distance available;
 - (c) For the purpose of paragraph (b), "landing distance available", if applicable, means an elevated heliport or helideck.
- (3) When complying with the provisions of this regulation, account shall be taken of -
 - (a) the pressure altitude at the destination;
 - (b) the expected air temperature at the destination:
 - (c) the landing technique to be used;
 - (d) not more than 50 per cent of the forecast head-wing component unless otherwise approved; and
 - (e) any expected variation in the mass of the helicopter during flight.
- (4) The operator shall ensure that the part of the landing from the specified landing decision point to touchdown, is conducted in sight of the surface.

Division Two: Class 2 Helicopter

General

- **127.08.7** (1) The operator of a Class 2 helicopter shall ensure that the part of the take-off prior to the defined point after take-off and after the defined point before landing, is conducted only in conditions of weather and light and over such routes and diversions therefrom which permit a safe forced landing to be executed in the event of engine failure.
- (2) A Class 2 helicopter shall not be permitted to operate from elevated structures in built-up areas.

Take-off

- **127.08.8** (1) The operator of a Class 2 helicopter shall ensure that the take-off mass of the helicopter does not exceed the maximum permitted take-off mass specified for a rate of climb for the pressure altitude and ambient temperature at the heliport of departure which allows the helicopter, in the event of the critical power unit becoming inoperative at any time after reaching the specified take-off decision point, to continue the take-off and initial climb and clear all obstacles along its flight path by a margin of 35 feet, until such helicopter can comply with the provisions of regulation 127.08.11.
- (2) The operator shall ensure that for an elevated heliport, the take-off mass is such that the helicopter is capable of
 - (a) rejecting the take-off and landing on the elevated heliport; or
 - (b) continuing the take-off and clearing the elevated heliport until such helicopter can comply with the provisions of regulation 127.08.11, or carry out a safe forced landing.
- (3) In complying with the provisions of sub-regulation (2), account shall be taken of
 - (a) the pressure altitude at the elevated heliport;
 - (b) the ambient temperature at the elevated heliport;
 - (c) the take-off technique to be used; and
 - (d) not more than 50 per cent of the reported head-wind component or, if such data is provided, not less than 150 per cent of the reported tail-wind component except that when approved wind measuring equipment is used, the headwind component may be factored by 80 per cent.
- (4) The operator shall ensure that the part of the take-off up to the commencement of the take-off flight path is conducted in sight of the surface.

Take-off flight path

- **127.08.9** (1) The operator of a Class 2 helicopter shall ensure that the take-off flight path clears all obstacles by a vertical margin of at least 35 feet in VFR and at least 35 feet plus 0.01 DR in IFR, where DR is the horizontal distance the helicopter has travelled from the end of the take-off distance available.
- (2) An obstacle need not be considered if its lateral margin from the nearest point on the surface below the intended flight path exceeds 30m or 1.5 times the overall length of the helicopter, whichever is the greater, plus
 - (a) 0.15 DR for VFR operations; or
 - (b) 0.30 DR for IFR operations.
- (3) Obstacles may be disregarded if they are situated beyond
 - (a) 7R for day operations, if it is assured that navigation accuracy can be achieved by reference to suitable visual cues during the climb;
 - (b) 10R for night operations, if it is assured that navigation accuracy can be achieved by reference to suitable visual cues during the climb;

- (c) 300 metres, if the pilot is able to maintain the navigation accuracy through navigation aids; and
- (d) 900 metres in all other cases.
- (4) For the purposes of sub-regulation (3), "R" means the rotor radius.
- (5) Where a change of direction of more than 15° is made, vertical obstacle clearance requirements shall be increased by 15 feet from the point at which the turn is initiated: Provided that such turn shall not be initiated before reaching a height of 100 feet above the take-off surface.
- (6) When complying with the provisions of this regulation, account shall be taken of
 - (a) the mass of the helicopter at the commencement of the take-off;
 - (b) the pressure altitude at the heliport;
 - (c) the ambient temperature at the heliport; and
 - (d) not more than 50 per cent of the reported head-wind component or not less than 150 per cent of the reported tail-wind component, unless otherwise approved.

En route with one or more engines inoperative

- **127.08.10** (1) The operator of a Class 2 helicopter shall ensure that, in the event of one engine becoming inoperative at any point in the en route flight path, appropriate to the meteorological conditions expected for the flight, the helicopter can comply with the provisions of this regulation at all points along the route.
- (2) When it is intended that the flight shall be conducted
 - (a) at any time out of sight of the surface, the mass of the helicopter shall permit a rate of climb of at least 50 feet per minute with one engine inoperative at an altitude of at least 1 000 feet or 2 000 feet in areas of mountainous terrain, above all obstacles along the route within 18.5 km on either side of the intended track;
 - (b) when it is intended that the flight will be conducted by day, VMC and in sight of the surface, only obstacles within 900 metres on either side of the route need to be considered.
- (3) The operator shall ensure that
 - (a) the flight path permits the helicopter to continue flight from the cruising altitude to a height of 1 000 feet above the heliport where a landing can be made in accordance with regulation 127.10.12;
 - (b) the flight path clears vertically by at least 1 000 feet or 2 000 feet in areas of mountainous terrain, all obstacles along the route within 18.5 kilometres on either side of the intended track; and
 - (c) the engine is assumed to fail at the most critical point along the route:

Provided that when it is intended that the flight will be conducted by day, VMC and in sight of the surface, only obstacles within 900 metres on either side of the route need to be considered.

(4) Account shall be taken of the effects of winds on the flight path.

(5) When complying with the provisions of this regulation, the width margins referred to in sub-regulations (2) and (3) may be reduced to 9.3 kilometres, if the required navigation accuracy can be achieved.

Landing

- **127.08.11** (1) The operator of a Class 2 helicopter shall ensure that the landing mass of the helicopter at the estimated time of landing does not exceed the maximum mass specified for the pressure altitude and ambient temperature expected for the estimated time of landing at the heliport at which it is intended to land, and at the alternate heliport, which shall allow the helicopter, in the event of the critical power unit becoming inoperative before the specified landing decision point after clearing all obstacles by a safe margin to either land and stop within the landing distance available or to perform a baulked landing and clear all obstacles in the flight path by a margin of 35 feet.
- (2) If the becoming inoperative of the critical power unit after the specified landing decision point may cause the helicopter to force land, the helicopter shall only be operated in conditions of weather and light, and over such routes and diversions therefrom, which permit a safe forced landing to be executed in the event of an engine failure.
- (3) When determining the landing mass for elevated heliports, the landing mass shall be such that the helicopter is capable of
 - (a) landing on the elevated heliport; or
 - (b) rejected the landing and clearing the elevated heliport, thereafter continuing the; flight or carrying out a safe forced landing.
- (4) In complying with the provisions of sub-regulation (3)(b), account shall be taken of
 - (a) the pressure altitude of the elevated heliport:
 - (b) the expected air temperature at the elevated heliport;
 - (c) the landing technique to be used;
 - (d) not more than 50 per cent of the forecast headwind component unless otherwise approved; and
 - (e) any expected variation in the mass of the helicopter expected during the flight.

Division Three: Class 3 Helicopter

General

- **127.08.12** (1) The operator of a Class 3 helicopter shall ensure that operations are only conducted in conditions of weather and light, and from those heliports and over such routes and diversions therefrom, which will permit a safe forced landing to be executed in the event of a power unit failure.
- (2) A Class 3 helicopter shall not be permitted to operate from elevated heliports in built-up urban areas.
- (3) The operator of a Class 3 helicopter, carrying passengers, shall not operate such helicopter under IMC or above more than three eighths of clouds within a radius of five nautical miles of

the helicopter, unless the latest weather reports or forecasts, or any combination of them, indicate that the weather along the planned route (including take-off and landing), with due regard for the provision of regulation 127.08.15, allows flight under VFR under the ceiling (if a ceiling exists) at prescribed minimum heights established in terms of regulation 127.07.6, and that the weather is forecast to remain so until at least one hour after the estimated time of arrival at the destination.

Take-off

- **127.08.13** (1) The operator of a Class 3 helicopter shall ensure that the take-off mass of the helicopter does not exceed the maximum permitted take-off mass specified for a hover inside ground effect with all power units operating at take-off power at the pressure altitude and ambient temperature at the take-off site.
- (2) For the purposes of this regulation, hover inside ground effect performance data shall include 17 knot wind accountability.
- (3) The helicopter shall be able, with all engines operating, to clear all obstacles along its flight path by a margin of 35 feet until such helicopter can comply with the provisions of regulation 127.08.15.

En route

127.08.14 The operator of a Class 3 helicopter shall ensure that the helicopter is able, with all power-units operating, to continue along its intended route or to a planned diversion without flying at any point below the appropriate minimum flight altitude.

Landing

- **127.08.15** (1) The operator of a Class 3 helicopter shall ensure that the landing mass of the helicopter at the estimated time of landing does not exceed the maximum landing mass specified for a hover inside ground effect or hover outside ground effect, whichever is the greater, with all power units operating at take-off power at the pressure altitude and ambient temperature expected for the estimated time of landing at a destination heliport and at any alternate heliport, if required.
- (2) For the purposes of this regulation, hover inside ground effect performance data shall include 17 knot wind accountability.
- (3) With all engines operating, the helicopter shall, at the destination heliport and at any alternate heliport, after clearing all obstacles in the approach path by a safe margin, be able to land and stop within the landing distance available, or to perform a baulked landing and clear all obstacles in the flight path by a margin of 35 feet.

SUBPART 9: MAINTENANCE

General

127.09.1 The operator of a commercial air transport helicopter shall not operate the helicopter unless such helicopter is maintained in accordance with the regulations in Part 43.

Helicopter maintenance schedule

- **127.09.2** (1) The operator of a commercial air transport helicopter shall ensure that the helicopter is maintained in accordance with a helicopter maintenance schedule established by the operator.
- (2) The schedule shall contain details, including frequency, of all maintenance required to be carried out on the helicopter.
- (3) The schedule shall include a reliability programme if the Director determines that such a reliability programme is necessary.
- (4) The helicopter maintenance schedule referred to in sub-regulation (1) and any subsequent amendment thereof shall be approved by the Director.
- (5) The operator of a commercial air transport Class C helicopter, to be operated at night or in IMC while carrying passengers, shall include in the schedule, referred to in sub-regulation (1)
 - (a) either the manufacturer's recommended engine trend monitoring programme, which includes an oil analysis, if appropriate; or
 - (b) an engine trend monitoring programme, approved by the Director, that includes an oil analysis at each 100 hours interval or at the manufacturer's suggested interval, whichever is more frequent.
- (6) The results of each test, observation, and inspection, required by the applicable engine trend monitoring programme prescribed by sub-regulation (5) shall be recorded and maintained in the engine maintenance records.
- (7) The schedule shall contain, in respect of any helicopter referred to in sub-regulation (5), written maintenance instructions containing the methods, techniques, and practices necessary to maintain the equipment specified in regulation 127.05.3.

Maintenance contracted to AMO

127.09.3 If maintenance on a commercial air transport helicopter is carried out by the holder of an AMO approval with the appropriate rating issued in terms of Part 145, the operator of the helicopter shall ensure that all contracted maintenance is carried out in accordance with the regulations in Part 43.

PART 133: HELICOPTER EXTERNAL-LOAD OPERATIONS

List of regulations

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SUBPART 1: GENERAL

Applicability

133.01.1 (1) This Part applies to –

- (a) helicopters engaged in commercial and non-commercial external-load operations within the Republic;
- (b) helicopters registered in the Republic and engaged in commercial and noncommercial international external-load operations; and
- (c) persons acting as flight crew members of the helicopters operated in terms of this part.

(2) The certification rules of this Part shall not apply to –

- (a) helicopter manufacturers when developing external-load attaching means;
- (b) helicopter manufacturers demonstrating compliance of equipment utilised under this Part or Part 21;
- (c) operations conducted by a person demonstrating compliance for the issuing of any certificate or authorisation under this Part; or
- (d) training flights conducted in preparation for the demonstration of compliance with this Part.

- (3) For the purposes of this Part, any person, other than a flight crew member or a person who is charged with duties essential to the helicopter external-load operation, may only be carried in a Class D helicopter-load combination.
- (4) For the purposes of this Part, external-load operations include underslung load operations, winching operations and any operation in which the helicopter is connected by means of a cable to another object, including towing.
- (5) Unless the context otherwise indicates, external-load operations shall be conducted in accordance with the provisions of this Part and in addition, the applicable provisions of Part 91 and Part 127.

Requirements for commercial external-load operations

- **133.01.2** The operator of a helicopter engaged in a commercial external-load operation shall not operate the helicopter unless such operator is the holder of a valid
 - (a) licence issued in terms of the Air Services Licensing Act, 1990, or the International Air Services Act, 1993; and
 - (b) operating certificate issued in terms of Part 127.

SUBPART 2: OPERATING RULES AND RELATED REQUIREMENTS

Operating rules

- **133.02.1** (1) No owner, operator or PIC of a helicopter engaged in an external-load operation shall operate the helicopter without, or contrary to, the helicopter-load combination flight manual referred to in regulation 133.03.4.
- (2) The owner, operator or PIC shall not operate the helicopter unless
 - (a) a standard category type certificate or a restricted category type certificate has been issued in respect of such helicopter in terms of Part 21;
 - (b) a valid certificate of airworthiness has been issued in respect of such helicopter in terms of Part 21; and
 - (c) such helicopter complies with the certification provisions of Subpart 3 that apply to the applicable class of helicopter-load combination.
- (3) The PIC of the helicopter shall, before such PIC operates such helicopter with an external-load configuration which differs substantially from any external load configuration previously carried with such type of helicopter, irrespective of whether the helicopter-load combination is of the same class, conduct, in a manner that will not endanger persons or property on the surface, the following applicable flight-operational checks:
 - (a) A determination that –

- (i) the mass of the helicopter-load combination and the location of its centre of gravity are within approved limits;
- (ii) the external load is securely fastened; and
- (iii) the external load does not interfere with devices provided for its emergency release;
- (b) make an initial lift-off and verify that controllability is satisfactory;
- (c) while hovering, verify that directional control is adequate;
- (d) accelerate into forward flight to verify that no attitude of the helicopter or of the external load is encountered, in which the helicopter is uncontrollable or which is otherwise hazardous;
- (e) in forward flight, check for hazardous oscillations of the external load: Provided that if the external load is not visible to such PIC, other flight crew members or ground personnel may make this check and signal the PIC; and
- (f) increase the forward airspeed and determine an operational airspeed at which no hazardous oscillation or hazardous aerodynamic turbulence is encountered.
- (4) Notwithstanding the provisions of Part 91, the owner or operator of a helicopter in respect of which a restricted category type certificate has been issued in terms of Part 21, may conduct an external-load operation over densely inhabited areas, if the operation is conducted without hazard to persons or property on the surface and complies with the following:
 - (a) The operator shall compile an approved plan for each complete operation, which shall include
 - (i) an agreement with the appropriate local government that local officials will exclude unauthorised persons from the area in which the operation will be conducted;
 - (ii) coordination with the appropriate ATSU, if necessary; and
 - (iii) a detailed chart depicting the flight routes and altitudes; and
 - (b) each flight shall be conducted at an altitude, and on a route, which will allow
 - (i) an external load for purposes of release, to be jettisoned; and
 - (ii) the helicopter to land in an emergency without hazard to persons or property on the surface.
- (5) Notwithstanding the provisions of Part 91 and except as prescribed in regulation 133.03.3 the owner or operator of a helicopter engaged in an external-load operation may conduct the operation, including an approach, departure, and load positioning manoeuvre necessary for the operation, below 500 feet above the surface and closer than 500 feet to persons, vessels, vehicles, and structures, if such operation is conducted without creating a hazard to persons or property on the surface.
- (6) No owner, operator or PIC of a helicopter engaged in an external-load operation shall
 - (a) conduct the operation under IMC, or
 - (b) carry passengers during the external-load operation,

unless flight under IMC, or external-load/passenger combination flights, or both, have been approved by the Director on the conditions contained in the operations manual referred to in

regulation 127.04.2; or unless prior written permission has been granted by the Director for a specific flight or series of flights on conditions prescribed by him or her: Provided that passengers shall never be carried outside the helicopter in an undersling operation under IMC.

Carriage of persons

- **133.02.2** (1) The owner or operator of a helicopter engaged in an external-load operation shall ensure that no person is carried during the operation unless such person
 - (a) is a flight crew member;
 - (b) is a flight crew member trainee;
 - (c) is charged with duties essential to the helicopter external-load operation; or
 - (d) is necessary to accomplish the work activity directly associated with that operation.
- (2) The PIC shall ensure that all persons are briefed before take-off on all pertinent procedures to be followed, including normal, abnormal and emergency procedures, and equipment to be used during the external-load operation.

Flight crew member training, currency and testing requirements

- **133.02.3** (1) The owner or operator of a helicopter engaged in an external-load operation shall ensure that the PIC
 - (a) is the holder of a valid underslung load rating (helicopter) or winching rating (helicopter), as the case may be, issued in terms of Part 61; and
 - (b) has the knowledge with respect to the helicopter-load combination including the
 - (i) steps to be taken before starting operations, including a survey of the flight area:
 - (ii) proper method of loading, rigging or attaching the external load;
 - (iii) performance capabilities, under approved operating procedures and limitations, of the helicopter to be used;
 - (iv) proper instructions of flight crew and ground personnel; and
 - (v) the applicable helicopter-load combination flight manual;
 - (c) has the skill in respect of the helicopter-load combination including
 - (i) take-off and landing;
 - (ii) directional control while hovering:
 - (iii) acceleration from a hover;
 - (iv) flight at operational airspeeds;
 - (v) approaches to landing or working area;
 - (vi) manoeuvring the external load into the release position; and
 - (vii) winch operation, if a winch is installed to hoist the external load.

- (2) The owner or operator of a helicopter engaged in an external-load operation, shall ensure that each flight crew member or other operations personnel member successfully completes the appropriate training, as prescribed in SA-CATS 133.
- (3) Training shall be given by the holder of the appropriate ATO approval issued in terms of Part 141 of these Regulations.
- (4) Upon successful completion of the training, the approved ATOs, referred to in subregulation (3), shall issue a certificate of competency to the flight crew member or other operations personnel member concerned.

SUBPART 3: AIRWORTHINESS REQUIREMENTS

Flight characteristic requirements

- **133.03.1** (1) The owner or operator of a helicopter engaged in an external-load operation shall demonstrate to the Director, by performing the operational flight checks prescribed in subregulation (3), (4) or (5), as the case may be, that the helicopter-load combination to be used in the operations has satisfactory flight characteristics.
- (2) For the purposes of the demonstration, the external-load mass, including the external-load attaching means, is the maximum mass for which authorisation is requested.
- (3) In the case of a Class A helicopter-load combination the operational flight check shall consist of at least the following manoeuvres:
 - (a) Take-off and landing;
 - (b) demonstration of adequate directional control while hovering;
 - (c) acceleration from a hover; and
 - (d) horizontal flight at airspeeds up to the maximum airspeed for which authorisation is requested.
- (4) In the case of a Class B and a Class D helicopter-load combination the operational flight check shall consist of at least the following manoeuvres:
 - (a) Pick up of the external load;
 - (b) demonstration of adequate directional control while hovering;
 - (c) acceleration from a hover;
 - (d) horizontal flight at airspeeds up to the maximum airspeed for which authorisation is requested;
 - (e) demonstrating appropriate lifting device operation; and

- (f) manoeuvring of the external load into release position and its release, under probable flight operation conditions, by means of each of the quick-release controls installed on the helicopter.
- (5) In the case of a Class C helicopter-load combination used in wire-stringing, cable-laying, or similar operations, the operational flight check shall consist of the appropriate manoeuvres prescribed in sub-regulation (4).

Structures and design

- **133.03.2** (1) Each external-load attaching means and each quick-release device shall have been approved under Part 21.
- (2) The total mass of the helicopter-load combination shall not exceed the total mass approved for the helicopter during its type certification.
- (3) The location of the centre of gravity shall, for all loading conditions, be within the range established for the helicopter during its type certification.
- (4) For a Class C helicopter-load combination, the magnitude and direction of the loading force shall be established at those values for which the effective location of the centre of gravity remains within its established range.

Operating limitations

- **133.03.3** (1) In addition to the operating limitations contained in the AFM referred to in Regulation 91.03.2, and any other limitations which the Director may determine, the owner or operator of a helicopter engaged in an external-load operation shall establish operating limitations and publish the operating limitations in the helicopter-load combination flight manual referred to in Regulation 133.03.4, for helicopter-load combination operations.
- (2) The operating limitations established by the owner or operator shall include
 - (a) the mass and centre of gravity limitations established in accordance with Regulation 133.03.2(2), (3) or (4) within which the helicopter-load combination may be operated;
 - (b) the external load mass of the helicopter-load combination which shall not exceed the external load mass referred to in Regulation 133.03.1(2) and 133.03.2(2) respectively;
 - (c) the airspeeds at which the helicopter-load combination may be operated, which airspeeds shall not be greater than the airspeeds established in accordance with Regulation 133.03.1(3), (4) or (5);
 - (d) a prohibition on the conducting of an external-load operation in terms of this Part, with a helicopter, type certificated in the restricted category in terms of Part 21, over a densely inhabited area, in a congested airway, or near an aerodrome licensed in terms of Part 139; and

- (e) in the case of a Class D helicopter-load combination such combination may only be conducted in accordance with the following:
 - (i) The helicopter to be used shall be of a multi-engine type and shall provide hover capability with one engine inoperative at that operating mass and altitude;
 - (ii) the helicopter shall be equipped to allow direct radio inter-communication among required flight crew members;
 - (iii) the personnel lifting device shall be of an approved type; and
 - (iv) the lifting device shall have an emergency release requiring two distinct actions.

Helicopter-load combination flight manual

- **133.03.4** (1) The owner or operator of a helicopter to be used in an external-load operation shall compile a helicopter-load combination flight manual and submit the helicopter-load combination flight manual for approval to the Director.
- (2) The helicopter-load combination flight manual shall be prepared in accordance with the AFM referred to in Regulation 91.03.2.
- (3) The helicopter-load combination flight manual shall include
 - (a) the operating limitations, other than the limiting height-speed envelope data, normal, abnormal and emergency procedures, performance and any other information required in terms of this Subpart;
 - (b) the class of helicopter-load combinations for which the airworthiness of the helicopter has been demonstrated in accordance with Regulation 133.03.1 and 133.03.2; and
 - (c) in the information section of the helicopter-load combination flight manual
 - (i) information on any peculiarities discovered when operating particular helicopter-load combinations;
 - (ii) precautionary advice regarding static electricity discharges for Class B, Class C and Class D helicopter-load combinations; and
 - (iii) any other information essential for safe operation with external loads.
- (4) The operator of a helicopter engaged in commercial external-load operations shall include the helicopter-load combination flight manual in the operations manual referred to in regulation 127.04.2.

Markings and placards

133.03.5 The owner or operator of a helicopter engaged in an external-load operation shall ensure that the following markings and placards are displayed in a conspicuous place and cannot be easily erased, disfigured, or obscured:

- (a) A placard displayed in the cockpit or cabin, stating the class of helicopter-load combination for which the helicopter has been approved and the occupancy limitation prescribed in regulation 133.03.3(2)(a); and
- (b) a placard, marking, or instruction, displayed next to the external-load attaching means, stating the maximum external load prescribed as an operating limitation in regulation 133.03.3(2)(b).

Equipment

133.03.6 When the pilot at the flight controls of a helicopter engaged in an external-load operation is not verbally guided by a flight crew member on board the helicopter, or by a person the ground using two-way radio communication or the appropriate hand signals, and such pilot is not able to monitor the external load from his or her station, such helicopter shall be fitted with a mirror in such manner that such pilot is able to monitor the external-loan from his or her station and conduct the operation without such guidance.

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SUBPART 1: GENERAL

Applicability

135.01.1 (1) This Part applies to any South African operator engaged in a commercial air transport operation using –

- (a) aeroplanes registered in the Republic of South Africa
 - (i) having a maximum certificated passenger seating capacity of 19 or less as authorized In the initial type certificate issued to such aeroplane; or
 - (ii) operating in an all-cargo configuration having a maximum certificated take-off mass of 8 618 kg or less;
- (b) any aircraft that is authorised by the Director to be operated under this Part;
- (c) persons employed, or otherwise engaged by the operator referred to in sub-regulation (1)(a), who perform functions essential to the operation of aeroplanes operated under this Part, and

- (d) persons, mail or cargo on board an aeroplane operated under this Part.
- (2) For the purposes of this Part, an aeroplane registered in another State and operated by the holder of an operating certificate issued in the Republic of South Africa, shall be deemed to be registered in the Republic.

Admission to flight deck

- **135.01.2** (1) An air service operator and the PIC of any aeroplane with a flight deck door operated under this Part, shall ensure that no person, other than the flight crew members assigned to the flight, is admitted to, or carried on the flight deck of the aeroplane unless such person is
 - (a) an authorised officer, inspector or authorised person; or
 - (b) permitted by, and carried in accordance with, the instructions contained in the operations manual referred to in regulation 135.04.2.
- (2) Notwithstanding sub-regulation (1), an operator of aeroplanes certificated or authorised for flight with one pilot may use the second seat on the flight deck as a passenger seat.
- (3) Notwithstanding sub-regulation (1), the PIC may, in the interests of safety, deny a person admission or remove such person from the flight deck. Any decision to deny admission or remove a person from the flight deck shall be reported to the operator and shall include the reasons for the decision.
- (4) The PIC shall ensure that any person carried on the flight deck is made familiar with the applicable safety equipment and pertinent operational procedures.

Passenger intoxication and unruly behaviour

- **135.01.3** (1) An air operator shall not permit a person to enter or be in the aeroplane while under the influence of alcohol or a drug having a narcotic effect, to the extent where it is reasonably foreseeable to the operator or PIC, that the safety of such aeroplane or its occupants is, or is likely to be endangered.
- (2) An operator shall establish procedures to ensure that any person referred to in sub-regulation (1) or one whose behaviour otherwise represents a threat to the safety of the aeroplane or its occupants or to the maintenance of good order and discipline on board the aeroplane is
 - (a) refused embarkation; or
 - (b) if such person is on board, restrained or disembarked, if possible.

Compliance with foreign and domestic regulations

- **135.01.4** (1) An operator shall ensure that all pilots are familiar with the laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto. The operator shall ensure that other members of the flight crew are familiar with such of these laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aeroplane.
- (2) The operator shall ensure that all employees, when abroad, know that they must comply with the laws, regulations and procedures of those States in which operations are conducted.

Language proficiency - other languages

135.01.5 In addition to the English language proficiency requirements specified in Part 61, an air service operator shall not assign a flight crew to duty unless at least one member of the flight crew has the ability to speak and understand the language used for radiotelephony communications over any route and at any aerodrome named in the OFP for that flight.

SUBPART 2: OPERATIONS PERSONNEL REQUIREMENTS

Division One: Flight crew requirements

Composition of flight crew

- **135.02.1** (1) The minimum number and composition of the flight crew shall not be less than the minimum number and composition specified in the aeroplane flight manual.
- (2) An air service operator shall allocate additional flight crew members when it is required by the type of operation, and the number of such additional flight crew members shall not be less than the number specified in the operations manual.
- (3) The flight crew shall include at least one member who is proficient in navigating over the route to be flown using the equipment required for such navigation.
- (4) An operator shall designate for each flight a PIC and, where the aeroplane is required by this Part to be operated by two pilots, a second-in-command.
- (5) A flight crew member may be relieved in flight of his or her flight deck duties by another flight crew member qualified in accordance with regulations 135.02.4 and 135.02.5.

Minimum requirements for assignment as PIC

135.02.2 (1) The operator shall not assign a PIC, and no flight crew member may accept any assignment to act as a PIC of any aeroplane unless such person meets the minimum flight time requirements for command and the operating experience requirements prescribed in Document SA-CATS 135.

- (2) The Director may, in the interests of safety, require a PIC to have additional flight time experience prior to operating in that position.
- (3) The operator shall publish the minimum flight time for assignment and operating experience requirements for a PIC in its operations manual.

Flight crew member emergency duties

- **135.02.3** (1) An operator and, where appropriate, the PIC of any aeroplane operated in terms of this Part, shall assign to each flight crew member concerned, the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.
- (2) The functions referred to in sub-regulation (1) shall be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration the possible incapacitation of individual flight crew members.
- (3) A flight crew member shall not accept an assignment of emergency functions unless such flight crew member has been instructed in the performance of such emergency functions in accordance with the requirements prescribed in Subpart 3 and shall include instruction in the use of all emergency and lifesaving equipment required to be carried.

Area, route and aerodrome qualifications

- **135.02.4** (1) An air service operator shall not assign, and a pilot shall not act as PIC of an aeroplane engaged in passenger-carrying operations, unless the PIC has familiarised him or herself with the area, route and aerodromes to be operated over or into prior to operating there, including consideration of
 - (a) the aerodrome operating minima, terrain and minimum safe altitudes;
 - (b) the *en* route and aerodrome meteorological conditions, in particular any localized adverse weather patterns;
 - (c) the meteorological, communication and air traffic and search and rescue facilities, services and procedures, as appropriate;
 - (d) the aerodrome obstructions, physical layout, approach aids and arrival, departure, holding and instrument approach procedures and weather minima;
 - (e) the procedures applicable to flight paths over densely inhabited areas and areas of higher traffic density; and
 - (f) with respect to the navigational capability associated with the route along which the flight is to take place,
 - (i) the use of the equipment needed to navigate the route; and
 - (ii) the navigational facilities and procedures, including any long-range or specialised navigation procedures or equipment, to be used.

(2) The operator shall establish in its operations manual the means by which the PIC is to become familiar with the area, route and aerodromes over or into which he or she is to operate.

Flight crew member qualifications

135.02.5 (1) Subject to sub-regulation (6), an air service operator shall not assign a person to act and no person shall act as the PIC or second-in-command of an aeroplane in a commercial air transport operation unless the person –

- (a) is the holder of valid licences, ratings and certificates appropriate to his or her assignment; and
- (b) has completed the training and checking requirements specified in Subpart 3 as appropriate to the intended flight.
- (2) A pilot who does not meet the recency requirements of regulation 91.02.4 or whose training and checking validity periods have lapsed shall regain competency as prescribed in the regaining competency requirements specified in Subpart 3.
- (3) Except as provided in sub-regulation (4), an operator shall not assign a person to act and no person shall act as the PIC or second-in-command on more than three aeroplane types for which a separate licence endorsement is required, having a maximum certificated take-off mass (MCM) greater than 5 700 kg and operated in terms of this Part.
- (4) If a person acts as the PIC or second-in-command on one or more aircraft types with an MCM greater than 5 700 kg in terms of Part 93, 96, 121 or 127, the number of aeroplane types operated in terms of this Part shall be reduced by an equal number.
- (5) The operator may permit a person to act and a person may act as the PIC or second-incommand of an aeroplane where the person does not meet the requirements of sub-regulation (1), if –
 - (a) the aeroplane is operated on a training, ferry or positioning flight; and
 - (b) the operator
 - (i) is authorised to do so in its operations manual; and
 - (ii) otherwise complies with the provisions of this Part.

Division Two: Other than flight crew requirements

Requirement for flight followers

135.02.6 An air service operator shall employ sufficient flight followers to ensure adequate operational control is exercised over its flights.

Flight follower qualifications

135.02.7 An air service operator shall not permit a person to act and no person shall act as a flight follower unless such person meets the training and checking requirements specified in Subpart 3.

Ground personnel qualifications

135.02.8 Where an air service operator employs ground personnel to provide essential ground support services appropriate to the aeroplanes and type of service being operated, the operator shall ensure –

- (a) persons assigned to the handling of dangerous goods are qualified to do so in accordance with Subpart 3; and
- (b) persons assigned to provide direct service to an operator's aeroplanes or any passenger, cargo or mail intended to be carried aboard such aeroplanes, are trained and qualified as appropriate to their assignments.

Division Three: Flight time and duty limitations

Flight time and duty period scheme

135.02.9 (1) An air service operator shall –

- (a) establish a scheme for the regulation of flight time and duty periods, rest periods and days free of duty as applicable, for each flight crew member that
 - (i) complies with the flight time and duty period limitations, rest periods and days free of duty, prescribed in Document SA-CATS 135; or
 - (ii) is a system of flight time and duty period limitations, rest periods and days free of duty proposed by the operator where the Director is of the opinion that an equivalent level of safety may be achieved by the operator's proposed scheme; and
- (b) publish the scheme referred to in sub-regulation (1)(a) in the operations manual referred to in regulation 135.04.2.
- (2) The operator shall not assign and no flight crew member shall accept an assignment if such assignment is not in compliance with the provisions of the scheme referred to in subregulation (1)(a) or if
 - (a) the operator or flight crew member knows or has been made aware that such flight assignment will cause the flight crew member to exceed the flight time and/or duty periods referred to in sub-regulation (1)(a) while on duty; or

- (b) the flight crew member is suffering from or, having regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue which may endanger the safety of the aeroplane or its flight crew members and passengers.
- (3) The operator shall not schedule a flight crew member for flight time for a period exceeding eight consecutive hours during any given duty period unless authorised in the scheme referred to in sub-regulation (1)(a).
- (4) Where any flight crew member is aware of any reason they would be in violation of the scheme referred to in sub-regulation (1)(a), that person shall, without delay, inform the operator. For the purposes of this regulation, the operator shall be taken to mean
 - (a) the appropriate management personnel if time permits;
 - (b) the duty crew scheduler of the operator; or
 - (c) the duty person responsible for operational control over the flight.

SUBPART 3: TRAINING AND CHECKING

Air service operator approved training programme

- **135.03.1** (1) An air service operator shall implement and maintain a training and checking programme for all personnel referenced in this Subpart that will ensure such personnel are adequately trained and qualified to perform their assigned duties and such personnel shall undergo the training from that operator, except as provided in Document SA-CATS 135.
- (2) The training programme referred to in sub-regulation (1) shall be conducted by an ATO approved in accordance with Part 141 or by the operator, if approved by the Director as provided in regulation 135.03.2: Provided that, in the latter case,
 - (a) such programme is conducted for the operator's employees only; and
 - (b) with respect to any licence, rating or validation under Part 61 or 64, the training is restricted to
 - (i) training for an instrument rating revalidation;
 - (ii) initial type rating, familiarisation and differences training; and
 - (iii) training for licence renewals and proficiency checks; or
 - (c) the training is for any other qualification or certification required under this Part.
- (3) An operator who has been approved to conduct its own training programme as provided for in sub-regulation (2), may contract such training either in whole or in part to another organisation in accordance with the provisions specified in Document SA-CATS 135.
 - (4) The operator shall ensure that –

- (a) prior to assignment to duty, each person required to receive training in accordance with this Subpart, shall, whether employed on a full- or part-time basis, receive training as appropriate to his or her duties in accordance with the provisions in Document SA-CATS 135;
- (b) each person required to receive the training referred to in paragraph (a), shall pass a written examination or other comprehension assessment acceptable to the Director and where applicable, complete a skills test as specified in this Subpart; and
- (c) the training facilities, equipment and personnel shall meet the requirements prescribed in Document SA-CATS 135.
- (5) The training and checking programme referred to in sub-regulation (1) shall meet the content prescribed in Document SA-CATS 135.
- (6) The training programme referred to in sub-regulation (1) shall include a system of record keeping as prescribed in regulation 135.04.8.
- (7) The training records referred to in sub-regulation (6) shall be retained as provided in regulation 135.04.8.
- (8) An operator shall publish the training programme referred to in regulation 135.03.1(1) in the operations manual referred to in regulation 135.04.2.

Approval of training programme

- **135.03.2** (1) An air service operator shall submit its ground and flight training programme and any amendments thereto to the Director for approval.
 - (2) The initial and final approval process shall be as prescribed in Document SA-CATS 135.

Flight crew member training

- **135.03.3** (1) An air service operator shall provide ground and flight training to its flight crew members that includes at least the following training components
 - (a) company induction training;
 - (b) crew resource management training;
 - (c) cabin safety procedures, emergency equipment procedures and security training;
 - (d) initial and recurrent aeroplane type ground and flight training; and
 - (e) regaining recency; and
 - (f) regaining qualification training.

- (2) An operator shall provide ground and flight training to its flight crew members that includes at least the following training components as appropriate to its operation and the type of aeroplane operated
 - (a) line induction training on aeroplanes with a maximum take off mass of greater than 5 700 kg following initial training or upgrade training;
 - (b) differences and familiarisation training where the operator intends to assign a flight crew member to variant types, in accordance with regulation 135.02.5(1)(b);
 - (c) initial upgrade training for aeroplanes required to be crewed by two pilots;
 - (d) for aeroplanes with dual controls, pilot training to operate in either pilot seat for pilots required to operate in either seat;
 - (e) area, route and airport familiarization training on initial conversion or upgrade training, as applicable;
 - (f) ACAS training;
 - (g) RVSM training;
 - (h) training for LVO;
 - (i) single-engine IFR and night VFR training;
 - (j) single pilot IFR and night VFR training;
 - (k) dangerous goods training if the operator is authorised to carry dangerous goods or, if not so authorised, dangerous goods awareness training; and
 - (I) any other course of studies required by the Director to ensure full competency of personnel on new or special equipment installed in the operator's aeroplane or other operations requiring specialised training.
- (3) The training required by sub-regulation (1) and (2) shall be as prescribed in Document SA-CATS 135.
- (4) The validity period for any training required under this Subpart shall be as prescribed in regulation 135.03.7.

Employee and service agent training

- **135.03.4** An air service operator shall provide initial, recurrent and refresher training and checking as prescribed in Document SA-CATS 135 for any person whose function is essential to safe operations in terms of this Part. Such training shall be given to at least
 - (a) flight followers;

- (b) ground service personnel as identified in regulation 135.02.8, as applicable; and
- (c) any other person the Director determines is required to receive training.

Checking of flight crew members

- **135.03.5** (1) No air service operator may assign nor may a PIC or second-in-command, if applicable, accept an assignment to operate an aeroplane under this Part unless he or she has completed the check requirements specified in Document SA-CATS 135.
- (2) The conduct of the checks required in terms of this Subpart shall be as prescribed in Document SA-CATS 135.

Training and pilot proficiency or competency check validity periods

135.03.6 (1) The validity periods of the training required by this Subpart for flight crew members are as follows:

- (a) Company induction training shall be indefinite while employed with that operator except that significant changes in policies or procedures are required to be conveyed to the employee as required.
- (b) Crew resource management training is valid to the first day of the thirteenth month following the last training.
- (c) Cabin safety, emergency equipment and security training
 - (i) cabin safety, emergency equipment and security theoretical training is valid indefinitely provided new equipment or procedures are not introduced, whereupon employees shall receive training in such equipment or procedures; and
 - (ii) practical training in the use of emergency equipment is valid until the first day of the thirty-seventh month following the last training.
- (d) Aeroplane ground and flight training is valid to the first day of the thirteenth month following the last training.
- (e) Regaining competency training is valid indefinitely unless a provision of the regulation is not met.
- (f) Line induction training is valid indefinitely unless the pilot is required to undergo initial or upgrade training.
- (g) Differences and familiarisation training is valid indefinitely provided recurrent ground and flight training is completed as provided in the approved training programme.
- (h) Upgrade training is valid indefinitely on that aeroplane type.
- (i) Pilot qualification to operate in either pilot seat is valid to the first day of the thirteenth month following the last training.

- (j) ACAS training is valid to the first day of the thirteenth month following the last training.
- (k) RVSM training is valid indefinitely provided the pilot has operated in RVSM airspace in the preceding 12 months.
- (I) LVO training is valid to the first day of the thirteenth month following the last training.
- (m) Single-engine IFR or night training is valid to the first day of the thirteenth month following the last training.
- (n) Single-pilot IFR or night operations training is valid to the first day of the thirteenth month following the last training.
- (o) Dangerous goods training and dangerous goods awareness training are valid to the first day of the twenty-fifth month following the last training.
- (p) The validity periods of training in other areas shall be as determined by the Director. Training with respect to flight operations involving the use of specialised equipment or procedures shall be accomplished as part of the annual recurrent training programme.
- (2) The validity period of the training required by this Subpart for employees and agents shall be as specified in the approved training programme.
- (3) Except as provided in technical standard 135.03.6 of Document SA-CATS 135, the following checking validity periods shall apply
 - (a) for flight crew members -
 - except as provided in subparagraph (ii), a PPC or competency check is valid to the first day of the seventh month following the month the PPC or competency check took place;
 - (ii) where an operator is approved for aeroplane grouping on specific aeroplane types, as provided in technical standard 135.03.6(5) of Document SA-CATS 135, such approval allows for the PPC completed on one aeroplane of the grouped types to be valid to the first day of the seventh month following the month in which the PPC took place for all the aeroplanes in that grouping; and
 - (iii) a line check is valid until the first day of the thirteenth month following the month the line check took place; and
 - (b) for other than flight crew members, checks are valid until the first day of the twenty-fifth month following the month the check took place.
- (4) Where any required training or check is renewed within the last 60 days of its validity period, its validity period is extended by 12, 24 or 36 months, as appropriate.
- (5) The Director may extend the validity period of any training or check by up to 30 days where the Director is satisfied that the application is justified and that aviation safety is not likely to be compromised: Provided the request for extension is submitted prior to the expiration of the check or training.

(6) Completion of a training or check requirement at any time during the periods specified in paragraphs (4) or (5) above shall be considered as completed in the month due for calculation of the next due date.

SUBPART 4: DOCUMENTATION AND RECORDS

Documentary requirements

135.04.1 (1) An air service operator shall ensure that, in addition to the requirements specified in regulation 91.03.1, the following documents are carried on board the aeroplane during flight –

- (a) a copy of the OFP;
- (b) the special loads notification (NOTOC), if applicable;
- (c) the insurance certificate or proof of insurance;
- (d) a copy of the AOC and operations specifications;
- (e) the load and trim sheet specified in regulation 135.04.9;
- (f) a copy of the standard operating procedures or aircraft operating manual, as applicable;
- (g) a copy of the operations manual referred to in regulation 135.04.2 or the portions of it required to be carried; and
- (h) a copy of the dangerous goods report as specified in regulation 92.00.15, if applicable.
- (2) The operator shall ensure that –
- (a) a copy of the OFP;
- (b) copies of the relevant parts of the flight folio;
- (c) the load and trim sheet;
- (d) the crew and passenger list and cargo manifest, if applicable; and
- (e) the NOTOC, if applicable;

are retained in a safe place at the first point of departure in respect of each flight undertaken by the aeroplane.

(3) Except when otherwise instructed by the Director, the documents referred to in sub-regulation (2) shall be retained at the operator's main base of operations, or other location if approved by the Director, for a period of at least 90 days.

Operations manual

135.04.2 (1) An air service operator shall prepare an operations manual containing all the information required under this Part and setting out the manner in which such operator will operate the air service for which such operator is licensed in terms of the International Air Services Act, 1993, or the Air Services Licensing Act, 1990, as the case may be.

- (2) The operator shall ensure that –
- (a) all parts of the manual are consistent and compatible in form and content and shall not contravene the conditions contained in the operating certificate or operations specifications issued to the operator in terms of regulation 135.06.3;
- (b) the manual can be readily amended;
- (c) the manual contains an amendment control page and a list of effective pages (LEP) that are in effect showing the effective date for each page in the manual; and
- (d) the manual has the date of the last amendment to each page specified on that page that agrees with the LEP.
- (3) The operator shall submit the operations manual in duplicate to the Director for approval.
- (4) If the Director is satisfied that the operator –
- (a) will comply with the provisions of regulation 135.06.7; and
- (b) will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, 1993 or the Air Services Licensing Act, 1990,

the Director shall certify in writing on both copies of the operations manual that such manual has been approved and shall return one copy of the approved operations manual to the operator.

- (5) The operator shall amend its operations manual –
- (a) where there is a change in any aspect of the operator's operation;
- (b) where the operations manual no longer meets the requirements of these regulations or associated technical standards; or
- (c) when so required by the Director.
- (6) The operator shall submit an amendment to its operations manual in duplicate to the Director for approval and if the Director is satisfied that the operator will comply with the provisions of sub-regulation (4), the Director shall certify in writing on both copies of the amendment to the operations manual that such amendment has been approved and shall return one copy of the approved amendment to the operator.
- (7) The operator shall at all times operate its aeroplanes in accordance with the approved operations manual or an approved amendment thereto.
 - (8) The operator shall –
 - (a) ensure that all operations personnel are able to understand the technical language used and that the information provided will ensure that such personnel are properly

- instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole;
- (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight are easily accessible to the crew members on board during flight time;
- (c) make the operations manual available for the use and guidance of operations personnel;
- (d) make available on board the aeroplane for the use of crew members, controlled copies of the sections of the operations manual which are relevant to the duties assigned to them;
- (e) provide each manual holder with copies of all amendments after approval by the Director and such manual holder shall insert amendments issued to him or her prior to their next flight assignment; and
- (f) keep the operations manual in a safe place.
- (9) The structure and contents of the operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 135.

Standard operating procedures

- **135.04.3** (1) An air service operator shall compile standard operating procedures (SOPs) for each aeroplane type being operated and make them available during flight time to all flight crew members assigned to the aeroplane and each flight crew member shall operate the aeroplane in accordance with such procedures.
- (2) The operator shall provide such portions of the SOPs to the operator's employees or agents if required in the performance of their duties.
- (3) The SOPs shall meet the requirements of, and contain the information specified in Document SA-CATS 135.
- (4) The operator shall ensure each flight crew member has access to the SOPs during flight time and that such SOPs are current.
- (5) The operator shall publish the SOPs as a stand-alone document as part of the manual system or include them in an aircraft operating manual (AOM) that meets the requirements of Document SA-CATS 135.
- (6) The operator may provide the SOPs or AOM in an electronic format provided a means of accessing the information during flight time has also been made available to any crew member who may have need to access the information therein.

Aeroplane flight manual

- **135.04.4** (1) An air service operator shall operate its aeroplanes in accordance with the approved aeroplane flight manual (AFM) required by regulation 91.03.2.
- (2) An operator shall maintain a system that ensures timely receipt and insertion of all AFM revisions as published by the aeroplane manufacturer or as required by the Director.

Operational flight plan

- **135.04.5** (1) An air service operator shall ensure that an OFP is completed for each flight undertaken by the aeroplane in terms of this Part.
- (2) The OFP and its use shall be contained in the operations manual referred to in regulation 135.04.2.
 - (3) All entries in the OFP shall be current and permanent in nature.
- (4) The items to be contained in the OFP shall be as prescribed in Document SA-CATS 135.
 - (5) The OFP shall be retained by the operator for a period of at least 90 days.

Flight time and duty period records

- **135.04.6** (1) An air service operator shall
 - (a) maintain current flight time and duty period records of all flight crew members in such operator's employ; and
 - (b) retain the flight time and duty period records for a period of 15 calendar months calculated from the date of the last flight of each flight crew member.
- (2) A flight crew member who is employed by more than one operator or otherwise accumulates flight time outside of his or her employment, shall maintain an accurate record of flight time and duty periods and shall provide copies thereof to all operators by whom such flight crew member is employed. While the flight crew member is responsible to report all flight activity, each employer maintains responsibility to ensure the flight crew member concerned does not exceed the limits prescribed in the flight time and duty scheme of the operator referred to in regulation 135.02.9.

Records of emergency and survival equipment

- **135.04.7** (1) An air service operator shall have on board the aeroplane a list of all the survival and emergency equipment to be carried in the aeroplane and shall have such a list available at the operator's facility at all times for immediate communication to rescue coordination centres.
- (2) The format and minimum information to be included in the survival and emergency equipment list shall be as prescribed in technical standard 91.01.5 of Document SA-CATS 91.

Training records

- **135.04.8** (1) An air service operator shall establish a training file for each person required to receive training and retain on such file a record of all training and checking required in terms of Subpart 3. The records of training and checking shall contain at least the information prescribed and be retained for the period of time specified in Document SA-CATS 135.
- (2) The operator shall establish procedures to make an employee's training file available for supervised review by such employee but all training files shall remain in the custody of the operator.

Load and trim sheet

- **135.04.9** (1) An air service operator shall ensure that no flight is undertaken by the aeroplane unless the person superintending the loading of such aeroplane has completed and certified a load and trim sheet.
- (2) No PIC may conduct a take-off unless he or she has accepted the load and trim sheet as provided in Document SA-CATS 135.
- (3) A load and trim sheet shall be completed in duplicate and one copy shall be carried in the aeroplane and one copy shall be retained in accordance with the provisions of regulation 135.04.1.
- (4) The minimum contents of a load and trim sheet shall be as prescribed in Document SA-CATS 135.

Aeroplane search procedure checklist

- **135.04.10** (1) An air service operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aeroplane may be the object of an act of unlawful interference.
- (2) The checklist referred to in sub-regulation (1) shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aeroplane where such information is available from the manufacturer.

Preservation of documents

135.04.11 An air service operator shall retain any document required in terms of Subpart 4, for the period of time specified therein even where, prior to the expiry of such retention period, the operator ceases to maintain ownership or possession of the aeroplane or no longer employs the person concerned.

ATS flight planning for a series of flights

- **135.04.12** (1) An air service operator shall ensure that an ATS flight plan is completed for each flight operated under this Part unless the flight is operated on a series of flights as provided in sub-regulation (2) and for each sector, alerting service has not been requested and the aeroplane does not
 - (a) depart or arrive at a controlled aerodrome;
 - (b) operate within or transit through any controlled or advisory airspace; or
 - (c) operate within an airway or advisory route unless crossing such at right angles.
- (2) For the purposes of sub-regulation (1), a series of flights is deemed to occur as long as the following criteria are met
 - (a) the series of flights shall not result in flight time longer than 90 minutes in total;
 - (b) no individual sector shall be longer than 30 minutes; and
 - (c) the time spent on the ground at each en route stop shall not exceed 30 minutes.

SUBPART 5: AEROPLANE INSTRUMENTS AND EQUIPMENT

General

- **135.05.1** (1) For the purposes of this Subpart, any reference to the initial date of a type certificate or certificate of airworthiness means the first time that type certificate or certificate of airworthiness was issued for that aircraft type.
- (2) An air service operator shall ensure that a flight does not commence unless the instruments and equipment referred to in sub-regulation (2) are such that will enable the flight crew to control the flight path of the aeroplane, carry out any required procedural manoeuvres and observe the operating limitations of the aeroplane in the expected operating conditions and are
 - (a) subject to the provisions of sub-regulation (3), approved and installed in accordance with the requirements, including operational and airworthiness requirements, applicable to such instruments and equipment; and
 - (b) in a condition for safe operation of the kind being conducted, except as provided for in the MEL referred to in regulation 135.07.22.
- (3) Except as provided in sub-regulations (1)(b) and (4), no person shall conduct a take-off in an aeroplane with instruments or equipment that are not serviceable or that have been removed, where such instruments or equipment are required by
 - (a) the standards of airworthiness that apply to the type of flight being operated;

- (b) any equipment list published by the aeroplane manufacturer respecting aeroplane equipment that is required for the intended flight;
- (c) an AOC;
- (d) an airworthiness directive; or
- (e) these Regulations.
- (4) A person may conduct a take-off in an aeroplane that has instruments or equipment that are not serviceable or that have been removed where the aeroplane is operated in accordance with the conditions of a flight permit that has been issued by the Director specifically for that purpose.
- (5) No person shall conduct a take-off in an aeroplane for which a MEL has not been approved and the aeroplane has instruments and equipment, other than the instruments and equipment specified in sub-regulation (2), that are not serviceable or that have been removed unless approved in the aeroplane flight manual or
 - (a) where the unserviceable instrument or equipment is not removed from the aeroplane, it is isolated or secured so as not to constitute a hazard to any other aeroplane system or to any person on board the aeroplane;
 - (b) the appropriate placards are installed as required by the maintenance control manual; and
 - (c) an entry recording the actions referred to in paragraphs (a) and (b) is made in the flight folio or other document approved for the operator, as applicable.

Flight, navigation and associated equipment for aeroplanes operated under VFR

135.05.2 (1) An air service operator shall not operate the aeroplane in accordance with VFR, unless such aeroplane is equipped with –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes and seconds;
- (c) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
- (e) a vertical-speed indicator;
- (f) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
- (g) an altitude indicator;

- (h) a stabilised direction indicator; and
- (i) a means of indicating on the flight deck the outside air temperature in degrees Celsius.
- (2) For aeroplanes required by these Regulations or the type certificate of the aeroplane to be operated by two pilots, the second pilot's station shall be equipped with
 - (a) a sensitive pressure altimeter with a subscale setting calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
 - (b) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
 - (c) a vertical-speed indicator;
 - (d) a turn-and-slip indicator or a turn coordinator, incorporating a slip indicator;
 - (e) an altitude indicator; and
 - (f) a stabilised direction indicator.
- (3) For flights, the duration of which does not exceed 60 minutes, which commence and end at the same aerodrome, and which remain within 25 nautical miles of such aerodrome, the instruments specified in sub-regulation (1)(f), (g) and (h), and sub-regulation (2)(d), (e) and (f), may be replaced by a turn-and-slip indicator, or a turn coordinator incorporating a slip indicator, or both an altitude indicator and a slip indicator.

Flight, navigation and associated equipment for aeroplanes operated under IFR or at night

135.05.3 (1) An air service operator shall not operate the aeroplane in accordance with IFR or at night, unless such aeroplane is equipped with –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes and seconds;
- (c) two sensitive pressure altimeters with subscale settings, calibrated in hectopascals, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing, including a warning indicator of pitot heater failure;
- (e) a vertical-speed indicator;
- (f) a turn-and-slip indicator or a turn co-ordinator, incorporating a slip indicator;
- (g) an altitude indicator;
- (h) a stabilised direction indicator;

- (i) a means of indicating on the flight deck the outside air temperature in degrees Celsius;
- (j) an alternate source of static pressure for the altimeter and the airspeed and verticalspeed indicators;
- (k) a chart holder in an easily readable position which can be illuminated, if to be operated at night;
- (I) a power-failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source; and
- (m) a pressure altitude reporting transponder with a capability of providing pressurealtitude information with a resolution of 25 ft or better –
 - (i) for all aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2009; and
 - (ii) for all large turbine-engine aeroplanes after 1 January 2014.
- (2) The operator shall not operate an aeroplane in IMC, unless such aeroplane is equipped with
 - (a) in the case of a single-engine aeroplane, as provided in regulation 135.07.5;
 - (b) in the case of a multi-engine aeroplane, at least two independent electrical generating systems, each operated by separate engines and individually capable of powering all required instruments and equipment necessary for safe emergency operation of the aeroplane; and
 - (c) for all aeroplanes, at least two independent sources of energy (with means of selecting either), of which at least one is an engine-driven pump or generator, which are both able to drive all required gyroscopic instruments powered by, or to be powered by, that particular source, and installed in such a manner that failure of one instrument or source does not interfere with the energy supply, to the remaining instruments or the other energy source except where the rate-of-turn indicator of a single-engine aeroplane involved in all-cargo operations only, has a source of energy separate from the bank and pitch and direction indicators. For the purpose of this sub-regulation, each engine-driven source of energy of a multi-engine aeroplane must be on a different engine;
- (3) The operator shall not operate aeroplanes required by these Regulations or the type certificate of the aeroplane to be operated by two pilots unless such aeroplanes are equipped as provided in regulation 135.05.2(2).
- (4) In addition to the flight and navigation equipment referred to in sub-regulations (1), (2) and (3), a large aeroplane shall be equipped with a single standby altitude indicator, capable of being used from either pilot's station which
 - (a) is powered continuously during normal operation and, after a total failure of the normal electrical generating system is powered from a source independent of the normal electrical generating system;

- (b) provides reliable operation for a minimum of 30 minutes after total failure of the normal electrical generating system, taking into account other loads on the emergency power supply and operational procedures;
- (c) operates independently of any other altitude indicating system;
- (d) is operative automatically after total failure of the normal electrical generating system and provides a clear indication on the instrument panel that the altitude indicator(s) is or are being operated by emergency power; and
- (e) is appropriately illuminated during all phases of operation:

Provided that if the standby altitude instrument system is capable of being used through flight altitudes of 360° of pitch and roll, the turn-and-slip indicators may be replaced by slip indicators.

- (5) Where the standby altitude indicator referred to in sub-regulation (4) has its own dedicated power supply, there shall be an associated indicator, either on the instrument or instrument panel, when such power supply is in use.
- (6) Instruments that are used by any pilot shall be so arranged as to permit the pilot to see their indications readily from his or her station with the minimum practicable deviation from the position and line of vision normally assumed when looking forward along the flight path.

Altitude alerting system

135.05.4 The operator of a large turbine-engine aeroplane shall not operate the aeroplane unless such aeroplane is equipped with an altitude alerting system capable of –

- (a) alerting the flight deck crew members upon approaching preselected altitude in either ascent or descent in sufficient time to establish level flight at such preselected altitude; and
- (b) alerting the flight deck crew members when deviating above or below a preselected altitude by at least an aural signal.

Terrain awareness and warning system

- **135.05.5** (1) All turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg, for which the individual certificate of airworthiness is first issued on or after 1 July 1979, shall be equipped with a TAWS.
- (2) All turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorised to carry more than nine passengers, for which the individual certificate of airworthiness is first issued on or after 1 January 2010, shall be equipped with a TAWS which has a predictive terrain avoidance function.
- (3) All turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorised to carry more than nine passengers, shall be equipped with a TAWS which has a predictive terrain avoidance function.

- (4) As from 1 January 2013 all piston-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorised to carry more than nine passengers shall be equipped with a TAWS which provides the warnings contemplated sub-regulations (6)(a) and (c), warning of unsafe terrain clearance and a predictive terrain avoidance function.
- (5) A TAWS shall automatically provide a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.
- (6) A TAWS shall provide, unless otherwise specified herein, warnings of the following circumstances
 - (a) excessive descent rate;
 - (b) excessive terrain closure rate;
 - (c) excessive altitude loss after take-off or go-around;
 - (d) unsafe terrain clearance while not in the landing configuration as follows -
 - (i) gear not locked down; or
 - (ii) flaps not in a landing position; and
 - (e) excessive descent below the instrument glide path.
- (7) The TAWS equipment required by this regulation shall meet the requirements specified in technical standard 91.04.33 of Document SA-CATS 91.
- (8 No person shall inhibit or otherwise render inoperative any required TAWS during flight time except in accordance with the approved aeroplane flight manual.

Airborne weather radar equipment

- **135.05.6** (1) Subject to the provisions of sub-regulation (2), an air service operator shall not operate an aeroplane at night or in IMC in an area where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radars, may be expected to exist along the route unless such aeroplane is equipped with airborne weather radar equipment.
- (2) In the case of a non-pressurized aeroplane, the airborne weather radar equipment may, however, be substituted by other approved equipment, which is capable of detecting thunderstorms and other potentially hazardous weather conditions, and of providing the flight crew with bearing and distance of such detected conditions.

Windshield wipers

135.05.07 An air service operator shall not operate a large aeroplane unless such aeroplane is equipped with a windshield wiper or equivalent system for each required pilot station.

Airborne collision avoidance system

135.05.8 (1) The operator of a large turbine-engine aeroplane shall not operate the aeroplane unless –

- (a) such aeroplane is equipped with a serviceable ACAS meeting ACAS II specifications, as prescribed in technical standard 91.04.31 of Document SA-CATS 91; and
- (b) the flight crew members have been trained in the use of ACAS as prescribed in technical standard 135.03.3 of Document SA-CATS 135.
- (2) Notwithstanding the provisions of sub-regulation (1), such aeroplane may be flown –
- (a) for the purpose of moving the aeroplane to a place to have an approved but unserviceable ACAS that is fitted to the aeroplane repaired, removed, substituted or overhauled; or
- (b) if the aeroplane is fitted with an approved ACAS that is unserviceable at the beginning of the flight
 - (i) for aeroplanes with an approved MEL, such aeroplane is operated in accordance with that MEL; or
 - (ii) for aeroplanes without an approved MEL -
 - (aa) if not more than 10 days have passed since the ACAS became unserviceable, excluding the day of discovery, or for such shorter duration as prescribed by the authority responsible for a particular airspace; or
 - (bb) if the TA and RA are inoperative on the non-flying pilot side, the TA and RA elements and audio functions are operative on the flying pilot side, and on intercontinental flights the TA and RA functions are visible to the non-flying pilot.
- (3) The PIC of an aeroplane that is fitted with a serviceable ACAS system shall take all reasonable steps to ensure that the system is activated at all times during flight, and that its use is consistent with the conditions prescribed for the area of operation.

Flight recorders

- **135.05.9** (1) An air service operator shall ensure that the aeroplanes required to be equipped with the flight recorders as provided in this Subpart are installed as specified in Document SACATS 135 and meet the crashworthiness and fire protection specifications as provided therein.
- (2) Flight recorders shall be checked and inspected daily and on an annual basis as specified in Document SA-CATS 135.
- (3) Flight recorders shall be deactivated upon completion of flight time following an accident or incident. The flight recorders shall not be reactivated before their disposition to the accident or incident investigation team.

- (4) An operator shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or a serious incident in which the aeroplane is not able to continue on its intended itinerary, the preservation of all related flight recorder records and, if necessary, the associated flight recorders and their retention in safe custody pending their disposition as determined in accordance with Part 12.
 - (5) The flight recorder shall not be switched off during flight time.

Flight data recorders

- **135.05.10** (1) An air service operator shall ensure that the aeroplane specified in Document SA-CATS 135 is equipped and operated with the FDR specified therein.
- (2) An operator shall ensure that the FDR required by sub-regulation (1) complies with the specifications prescribed in Document SA-CATS 135.
- (3) The parameters of the FDR shall be determined to be within the ranges, accuracies and recording intervals as prescribed in Document SA-CATS 135 and, where required by subregulation (1), shall comply with the requirements of
 - (a) a Type I/IA FDR capable of recording the parameters that accurately determine the aeroplane flight path, speed, altitude, engine power, configuration and operation; or
 - (b) a Type II/IIA FDR capable of recording the parameters that accurately determine the aeroplane flight path, speed, altitude, engine power and configuration of lift and drag devices.
 - (4) No operator may operate an aeroplane equipped with a FDR using –
 - (a) metal foil;
 - (b) photographic film technology; or
 - (c) from 1 January 2016, magnetic tape.
- (5) The FDR required by sub-regulation (1) shall be capable of retaining the data recorded during at least the last 25 hours of its operation except for the Type IIA FDR which shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.
- (6) The data obtained from a FDR shall be obtained from aeroplane sources which enable accurate correlation with information displayed to the flight crew.
- (7) The FDR shall start automatically to record the data prior to the aeroplane being capable of moving under its own power and shall stop automatically after the aeroplane is incapable of moving under its own power.
 - (8) An aeroplane may commence a flight with the FDR inoperative: Provided that –
 - (a) for aeroplanes with an approved MEL, the aeroplane is operated in accordance with that MEL and such MEL incorporates the provisions of paragraph (b) below; or

- (b) for aeroplanes without an approved MEL
 - (i) the aeroplane shall not depart from an aerodrome where repairs or replacements to such FDR can be made;
 - (ii) the aeroplane does not exceed six further consecutive flights with the FDR unserviceable:
 - (iii) not more than 48 hours have elapsed since the FDR became unserviceable; and
 - (iv) such FDR is not a CVR combined with the FDR and the CVR is serviceable and functioning in accordance with the requirements of regulation 135.05.12.

Cockpit voice recorders

135.05.11 (1) An air service operator shall ensure the aeroplanes specified in Document SA-CATS 135, when operated in terms of this Part, are equipped with the CVR specified in Document SA-CATS 135 and that such CVR complies with the specifications prescribed therein.

- (2) The CVR shall record, with reference to a time scale –
- voice communications transmitted from or received on the flight deck or in the cockpit by radio;
- (b) the aural environment of the flight deck or cockpit, including without interruption, the audio signals received from each microphone in use;
- (c) voice communications of flight crew members on the flight deck or in the cockpit using the interphone system of the aeroplane, if installed;
- (d) voice or audio signals identifying navigation or approach aids introduced into a headset or speaker; and
- (e) voice communications of flight crew members on the flight deck or crew members in the cockpit using the public address system of the aeroplane, if installed.
- (3) The CVR shall –
- (a) be capable of retaining information recorded during at least the period of time as prescribed in Document SA-CATS 135;
- (b) start automatically to record the aeroplane moving under its own power and continue to record, until the termination of the flight when the aeroplane is no longer capable of moving under its own power; and
- (c) if possible, start to record the cockpit checks prior to engine start at the beginning of the flight, until the cockpit checks immediately following engine shutdown at the end of the flight.
- (4) The CVR may be combined with a FDR referred to in regulation 135.05.11.

- (5) From 1 January 2016, no operator may operate an aeroplane equipped with a CVR using magnetic tape or wire.
 - (6) An aeroplane may commence a flight with the CVR inoperative: Provided that –
 - (a) for aeroplanes with an approved MEL, such aeroplane is operated in accordance with that MEL and such MEL incorporates the provisions of paragraph (b) below; or
 - (b) for aeroplanes without an approved MEL
 - (i) the aeroplane shall not take-off from an aerodrome where repairs or replacements to such CVR can be made;
 - (ii) the aeroplane does not exceed six further consecutive flights with the CVR unserviceable;
 - (iii) not more than 48 hours have elapsed since the CVR became unserviceable; and
 - (iv) any FDR required to be carried is operative, unless the FDR is combined with a CVR.

Flight recorders utilising data link technology

- **135.05.12** (1) All aeroplanes for which the individual certificate of airworthiness was first issued after 1 January 2016, which utilise any of the data link communications applications listed in Document SA-CATS 135 and are required to carry a CVR shall record on a flight recorder, all data link communications messages.
- (2) All aeroplanes which are modified on or after 1 January 2016 to install and utilise any of the data link communications applications listed in Document SA-CATS 135 and are required to carry a CVR shall record on a flight recorder the data link communications messages.
- (3) Sufficient information to derive the content of the data link communications message and, whenever practical, the time the message was displayed to or generated by the crew, shall be recorded.

Lifesaving equipment during flight over open water

- **135.05.13** (1) No air service operator shall operate a aeroplane over water at a distance of more than 50 nm from shore, in any operation described in sub-regulation (2) unless there is carried on board one life jacket or equivalent individual flotation device for each person on board, stowed in a position easily accessible from each seat or berth occupied by such person.
 - (2) The equipment prescribed in sub-regulation (1) applies to –
 - (a) landplanes having two or more power-units, where in the event of the failure of one power-unit for aeroplanes having two power-units or two power-units for aeroplanes having three or more power-units, a ditching would be required;
 - (b) for single-engine landplanes, when operating over water beyond gliding distance from the shore; or

(c) when taking off or landing at an aerodrome where the aeroplane flight path is over water and in the opinion of the Director, should any mishap occur, there would be a likelihood of the aeroplane ditching into the water.

Equipment requirements for aeroplanes on long range over-water flights

135.05.14 (1) In addition to the equipment prescribed in regulation 135.05.13 (1), the following equipment shall be installed in all aeroplanes when used over routes on which the aeroplane may be over water and at more than a distance corresponding to 120 minutes at cruising speed or 400 nm, whichever is the lesser, away from land suitable for making an emergency landing in the case of aeroplanes operated in accordance with 135.05.13 (2)(a), and 30 minutes or 100 nm, whichever is the lesser, for all single-engine landplanes –

- (a) life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in an emergency, provided with such life-saving equipment, including means of sustaining life as is appropriate to the flight to be undertaken; and
- (b) equipment for making distress signals.
- (2) Each life jacket and equivalent individual flotation device shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.
- (3) The life raft, survival radio equipment and information requirements for such extended over-water flights shall be as prescribed in technical standard 91.04.28 of Document SA-CATS 91.

Equipment requirements for seaplanes

135.05.15 All seaplanes, including amphibian aeroplanes operated as seaplanes, for all flights shall be equipped with –

- (a) one life jacket, or equivalent individual flotation device, for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided;
- (b) equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea, where applicable; and
- (c) one sea anchor (drogue).

Emergency locator transmitter

135.05.16 (1) No air service operator shall operate an aeroplane certificated for 19 passengers or less unless such aeroplane is equipped with –

- (a) at least one ELT of any type; and
- (b) where the aeroplane is of a type for which the individual certificate of airworthiness was first issued after 1 July 2008, at least one automatic ELT.

- (2) ELT equipment carried in terms of sub-regulation (1) shall operate and be installed as prescribed in technical standard 91.04.26 of SA-CATS 91.
- (3) ELTs required to be fitted in terms of this regulation, shall be capable of transmitting on the frequencies 121,5 MHz and 406 MHz simultaneously.
- (4) Notwithstanding sub-regulations (1) and (2), an aeroplane may be operated without a serviceable ELT where
 - (a) it is operated in accordance with a MEL approved by the Director; or
 - (b) where a MEL has not been approved by the Director in respect of the aeroplane, the operator
 - (i) repairs or removes the ELT at the first aerodrome at which repairs or removal can be accomplished;
 - (ii) on removal of the ELT from the aeroplane, sends the ELT to a maintenance facility;
 - (iii) displays on a readily visible placard within the aeroplane cockpit, for the period of removal of the ELT from the aeroplane, a notice stating that the ELT has been removed and setting out the date of removal; and
 - (iv) installs a serviceable ELT within 5 days after the date of removal.

Microphones

135.05.17 All flight crew members when operating, who are required to be on flight deck duty, shall communicate through boom or throat microphones below the transition level/altitude.

First aid kit

- **135.05.18** (1) No air operator shall operate an aircraft unless such aircraft is equipped with a first aid kit consisting of the medical supplies as prescribed in Document SA-CATS 135.
- (2) The owner or operator shall carry out periodical inspections of the first aid kit specified in sub-regulation (1) to ensure that, as far as practicable, the contents thereof are in a condition necessary for their intended use.
- (3) The contents of the first aid kit specified in sub-regulation (1) shall be replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances require.
- (4) The first aid kit specified in sub-regulation (1) shall be readily accessible to the crew or passengers.

SUBPART 6: AIR OPERATOR CERTIFICATE

Requirements to hold AOC

- **135.06.1** (1) No air service operator shall operate an aeroplane unless the operator is the holder of and complies with the conditions of a valid AOC including the operations specifications attached thereto, issued in terms of this Part and an air services licence issued in terms of the Air Services Licensing Act, 1990, or the International Air Services Act, 1993.
- (2) The holder of an AOC shall not wet lease in more than fifty percent of its entire fleet nor more than fifty percent of the aeroplane type in the fleet having the greatest MCM.
- (3) The operations specifications of an AOC shall contain a record of at least the type, model or series, and registration of each aeroplane approved for use by an operator.

Application for issuance or amendment of AOC and operations specifications

- **135.06.2** (1) An application for the issuance or amendment of an AOC or associated operations specifications (OpSpecs) shall be made to the Director in the form and manner prescribed in Document SA-CATS 135 and shall be accompanied by the appropriate fee prescribed in Part 187.
- (2) Each application made in terms of sub-regulation (1), subject to the approval of the Director, shall demonstrate that the applicant
 - (a) has adequate equipment, facilities and personnel to operate the proposed commercial air transport operation; and
 - (b) is able to conduct the commercial air transport service in a safe and proper manner and in full compliance with all applicable rules and regulations.
- (3) The submission of an application under this Subpart does not place any obligation upon the Director to issue an AOC or OpSpecs until he or she has been given reasonable time, as agreed in the schedule of events, to review the application and the application has been adjudicated in terms of regulation 135.06.3.
- (4) The holder of an AOC may add to its AOC an aeroplane registered on another AOC: Provided
 - (a) the aeroplane is not registered on more than three AOCs;
 - (b) the aeroplane is maintained by only one AMO;
 - (c) the manual of procedures or maintenance control manual, as applicable, for all operators and the Operations Specifications for each operator, specify the AMO responsible for the maintenance of each shared aeroplane, by aeroplane registration number;
 - (d) the aeroplane flight folio used is the same for all operators, such that there is but one continuous record of the aeroplane's activities, and the flight crew members are trained in the procedures for completion of the flight folio;

- (e) there is one method with respect to the entry, reporting and rectification of defect procedures and the flight crew members are trained in those procedures;
- (f) the flight crew members use the MEL approved for the aeroplane and are trained in the MEL procedures for that particular aeroplane, if applicable, and the operations manual specifies the procedures the flight crew are to follow in the event contact with maintenance personnel is needed; and
- (g) the flight crew members receive ground and flight training covering any differences between the model(s) operated by the operator and that being added to the AOC, including at least
 - (i) safety equipment contained on board;
 - (ii) ancillary equipment such as navigational aids, auto flight system, flight director or FMS, ACAS, TAWS, weather radar, etc; and
 - (iii) systems differences, engine/airframe limitations, performance considerations and operating characteristics,

and the results of such training are recorded on the flight crew member's training file.

- (5) The personnel referred to in sub-regulation (2)(a) shall be comprised of the following positions, the incumbents of which shall be approved by the Director
 - (a) chief executive officer;
 - (b) person responsible for flight operations;
 - (c) person responsible for aircraft;
 - (d) air safety officer;
 - (e) quality manager; and
 - (f) security manager.
- (6) When, after consideration of the scope and size of an operator applicant, the Director is of the opinion that it would be appropriate, he or she may approve the assignment of more than one position to one person or approve different positions.
- (7) The nominated post-holders required by sub-regulation (6) shall meet the qualifications and be responsible for the functions specified in Document SA-CATS 135.
- (8) Any post-holder of the positions listed in sub-regulation (6), who held such position on the commencement of these Regulations, shall be deemed to meet the qualifications required by Document SA-CATS 135: Provided that
 - (a) for a nominated post-holder, such person is satisfactory to the Director;

- (b) for an incumbent, that incumbent has discharged his or her responsibilities to the satisfaction of the Director; and
- (c) for a nominated or incumbent post-holder, such person meets the qualifications specified in Document SA-CATS 135 within six months from the commencement of these Regulations.
- (9) Notwithstanding any provision of the Regulations, where any manager no longer meets the qualifications required for that position or fails to discharge the responsibilities of that position, the Director may withdraw such approval.
 - (10) The Director may amend any AOC if –
 - (a) he or she determines that safety in commercial air transport and the public interest requires the amendment; or
 - (b) the holder of the AOC applies for an amendment, and the Director determines that safety in commercial air transport and the public interest requires such amendment.
- (11) If the Director stipulates in writing that an emergency exists requiring immediate amendment in the public interest with respect to safety in commercial air transportation, such an amendment becomes effective on the date the holder of an AOC receives such notice.
- (12) A holder of an AOC may make representations to the Director against the amendment contemplated in sub-regulation (11)(a) or (12), but shall continue to operate in accordance with such amendment, unless it is subsequently varied or withdrawn.
- (13) Amendments approved by the Director, other than emergency amendments referred to in sub-regulation (12), become effective 30 days after notice to the holder of an AOC, unless the holder of the AOC makes representations against such proposal as contemplated in sub-regulation (13) prior to the effective date.
- (14) Amendments proposed by the holder of an AOC shall be made at least 30 days prior to the intended date of any operation under the proposed amendment.
- (15) No person may perform a commercial air transport operation for which an AOC amendment is required, unless that person has received notice of the approval from the Director.

Application, adjudication of and issuance of AOC or operations specifications

- **135.06.3** (1) In considering an application referred to in regulation 135.06.2, the Director may conduct any investigation he or she deems necessary to determine the applicant's ability to meet the requirements specified in this Part.
- (2) An application shall be granted and the appropriate aviation document issued, containing such conditions as the Director determines, if the Director is satisfied that –

- (a) the applicant will comply with the provisions of its AOC and operations specifications;
 and
- (b) the applicant will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, No. 60 of 1993, or the Air Service Licensing Act, 1990.
- (3) Where in the opinion of the Director an applicant has failed to provide satisfactory evidence of qualification for the document being sought, the applicant will be informed by the Director as to the deficiencies and will be given a reasonable opportunity to rectify such deficiencies after which time the Director shall grant or refuse the application concerned.
- (4) An AOC and associated operations specifications shall be issued in a prescribed form and shall contain at least the information prescribed in Document SA-CATS 135.

Validity and status of AOC

- **135.06.4** (1) Unless otherwise specified by the Director, an AOC shall remain valid and in force until suspended or cancelled: Provided that
 - (a) the operator submits on or before the anniversary date of initial issue, the appropriate annual fee as prescribed in Part 187;
 - (b) the operator successfully completes such audits and inspections as were carried out by the Director, including the satisfactory resolution of any findings reported to the operator by the Director;
 - (c) the operator continues to meet the requirements for issue of an AOC; and
 - (d) the AOC is not voluntarily returned to the Director.
 - (2) An AOC is not transferable to any other entity.
- (3) Where an operator is notified by the Director that its AOC has been suspended or cancelled, the operator shall return the AOC to the Director within seven days of such notification.

Safety and security inspections and audits

35.06.5 An applicant for the issuance of an AOC shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits which may be necessary to verify the validity of an application made in terms of regulation 135.06.2.

Administrative duties of an AOC holder

- **135.06.6** (1) The holder of an AOC shall keep the AOC in a safe place and produce such AOC to an authorised officer or inspector for inspection if so requested by such officer or inspector.
- (2) An air service operator shall advise the Director of any changes in the personnel occupying the management positions specified in regulation 135.06.2(5) and shall submit the

names and qualifications of the replacement person(s) to the Director for approval before effecting such changes: Provided that, in the case of the sudden departure of an incumbent, the operator shall immediately notify the Director of the event and the means by which safety of operations will be ensured while replacing such person.

(3) An operator shall notify the Director in the event of any change in the ownership of the operator, including the names and contact details of the new owners.

Register of AOCs

135.06.7 (1) The Director shall maintain a register of all AOCs issued in terms of these regulations.

- (2) The register shall contain the following particulars –
- (a) the full name and, if any, the business name of the holder of the AOC;
- (b) the postal address of the holder of the AOC;
- (c) the number of the AOC issued to the holder;
- (d) particulars of the type of air service for which the AOC was issued, including a list of operations specification issued;
- (e) particulars of the category of aeroplane for which the AOC was issued; and
- (f) the date on which the AOC was issued.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within 30 days from the date on which the AOC is issued by the Director.
 - (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Demonstration flights

135.06.8 (1) No person may operate a large aeroplane in commercial air transport unless he or she first conducts satisfactory demonstration flights as specified in Document SA-CATS 135.

- (2) No person may operate an aeroplane in a designated special area, or use a specialised navigation system, unless he or she conducts a satisfactory demonstration flight as required by the Director.
- (3) The Director may authorise deviations from this regulation if he or she finds that special circumstances make full compliance with the provisions of this regulation unnecessary.

SUBPART 7: FLIGHT OPERATIONS

Division One: General

Routes and areas of operation and aerodrome facilities

135.07.1 (1) An aeroplane shall not be operated over any route or airway in IMC unless –

- (a) in the case of a single-engine aeroplane, the cloud base at any point along the route of flight is not lower than that which would permit descent in VMC below the minimum en route altitude published or established by the operator for such route or airway;
- (b) in the case of a twin-engine aeroplane in the event of the failure of the critical engine,
 - (i) the aeroplane is capable of maintaining the minimum *en route* altitude published or established by the operator for such route or airway; or
 - (ii) the aeroplane is not capable of maintaining the minimum *en route* altitude published or established by the operator for such route or airway and
 - (aa) the aeroplane is able to maintain flight to a suitable landing area, the cloud base at any point along the route of flight is not lower than that which would permit descent in VMC below the minimum *en route* altitude published or established by the operator for such route or airway and flight in VMC to a suitable landing area; or
 - (bb) the aeroplane is unable to maintain flight to a suitable landing area, the cloud base at any point along the route of flight is not lower than that which would permit descent in VMC below the minimum *en route* altitude published or established by the operator for such route or airway;
- (c) in the case of an aeroplane having three or more engines in the event of the failure of any two engines, maintaining the minimum *en route* altitude published or established by the operator for such route or airway; and
- (d) in addition to paragraphs (b)(i), (b)(ii)(aa) and (c), the aeroplane shall be capable of landing at the intended destination or alternate aerodrome in accordance with the related landing performance criteria for such aeroplane.
- (2) The operator of an aeroplane shall select at least one destination alternate aerodrome for each IFR flight unless
 - (a) for other than an isolated aerodrome
 - (i) two separate runways, arranged such that the closure of one cannot affect the operations of the other and each with an operational straight-in approach procedure, are available and usable by the flight crew at the destination aerodrome; and
 - (ii) the duration of the flight from the departure aerodrome, or from the point of in-flight re-planning, to the destination aerodrome is such that, taking into account all operational information relevant to the flight, for a period of at least one hour

before and one hour after the estimated time of arrival, a reasonable certainty exists that the approach and landing may be made under VMC; or

- (b) for a destination aerodrome that is isolated and for which no adequate destination alternate aerodrome exists,
 - (i) a standard instrument approach procedure is prescribed for the aerodrome of intended landing and the associated navigation aids will be functional from two hours before time of arrival; and
 - (ii) available current meteorological information indicates that the following meteorological conditions will exist from two hours before time of arrival
 - (aa) a cloud base of at least 1 000 ft above the minimum associated with the instrument approach procedure; and
 - (bb) visibility of at least 5.5 km or of 4 km more than the minimum associated with the procedure, whichever is greater.
- (3) The operator of an aeroplane shall select at least two destination alternate aerodromes for each IFR flight when
 - (a) the appropriate weather reports or forecasts for the destination aerodrome, or any combination thereof, indicate that during a period commencing one hour before and ending one hour after the estimated time of arrival, the weather conditions will be below the applicable planning minima; or
 - (b) meteorological information is not available at the destination aerodrome.
- (4) An air service operator shall not permit, nor may a PIC operate, a flight that is to be conducted in accordance with IFR, for which one or more destination alternate aerodromes are required, to be commenced unless the aerodrome meteorological forecast indicates that conditions for a period of at least one hour before until one hour after the estimated time of arrival at the destination alternate aerodrome(s) will meet or exceed those specified in Document SA-CATS 135.
- (5) The operator shall operate all flights in accordance with such route, aerodrome or other approvals and conditions pertaining to flight operations as are contained in the AOC.
- (6) The operator shall specify in its operations manual the procedures used to determine the minimum altitudes to be flown in order to meet the obstacle clearance requirements specified in regulation 135.07.24 and, for operations in uncontrolled airspace, the means for ensuring a navigational capability is maintained while operating on any route used therein.
 - (7) The operator shall ensure that -
 - (a) the equipment of the aeroplane intended to be used, complies with the minimum requirements for the planned operation; and

- (b) except as approved by the Director in accordance with Document SA-CATS 135, no operator shall operate a twin-engine aeroplane under this Part over a route which contains a point further from an adequate and suitable aerodrome than the distance that can be flown, under standard conditions in still air, in 120 minutes at the one-engine inoperative cruise speed.
- (8) No operator shall commence a flight unless it has been ascertained by every reasonable means available that the ground facilities and services, including meteorological and rescue fire fighting services
 - (a) are available as required for the safe operation of the aeroplane and the protection of the passengers;
 - (b) are adequate for the type of operation being conducted; and
 - (c) are functioning normally for their intended purpose.
- (9) An operator shall establish procedures in its operations manual that will ensure an operation can be safely conducted in the event that the rescue fire fighting services at an aerodrome that may be used are or may be below that for which the aerodrome is certified, and such procedures shall include a risk assessment.
- (10) The operator shall report without delay to the responsible authority any observed operational inadequacy of facilities referred to in sub-regulation (8).

Establishment of procedures

135.07.2 (1) An air operator shall -

- (a) establish for each aeroplane type, procedures and instructions for ground personnel and crew members pertaining to their duties for all types of operations on the ground and in flight;
- (b) provide a checklist system to be used by flight crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that the operating procedures in the operations manual are followed;
- (c) ensure that flight crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the aeroplane; and
- (d) ensure specific procedures are developed to instruct pilots with respect to rates of climb and descent in the various stages of flight.
- (2) The approved checklist system referred to in sub-regulation (1)(b) shall include –
- (a) an easy-to-use checklist for normal phases of flight operations;
- (b) a quick reference-type checklist dealing with all malfunctions requiring the use of abnormal or emergency procedures;

- (c) an amplified checklist that ensures all referenced check items are dealt with in accordance with the aeroplane manufacturer's recommended procedures, if any;
- (d) an easy to locate and employ system of supplementary checks and/or procedures, if applicable; and
- (e) any other check items relating to the use of equipment not installed at the time of aeroplane manufacture or not included in the check system provided for in the approved aeroplane flight manual.
- (3) The PIC shall ensure all check procedures, including checklists, are complied with in detail.

Competence of operations personnel

135.07.3 An air operator shall ensure that all personnel assigned to, or directly involved in ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

Use of air traffic services

135.07.4 An air operator shall ensure that air traffic services are used for all flights whenever available.

Single-engine aeroplane IMC and night operations

- **135.07.5** (1) Except as provided in sub-regulations (2) and (3), no air service operator shall operate a single-engine aeroplane with passengers or cargo on board in IMC or night flight.
- (2) An operator may operate a single turbine-engine aeroplane with passengers on board in IMC or night flight: Provided such operator
 - (a) is authorized to do so in its operations specifications; and
 - (b) complies with the provisions prescribed in Document SA-CATS 135.
- (3) An operator may operate a single-engine aeroplane with cargo only on board in IMC or night flight: Provided such operator
 - (a) meets the requirements of sub-regulation (2); or
 - (b) is authorized to do so in its operations specifications; and
 - (c) complies with the provisions prescribed in Document SA-CATS 135.

Defect reporting

135.07.6 (1) An air operator shall establish adequate inspection and reporting procedures to ensure that defective equipment is reported to the PIC of the aeroplane before take-off and

where a defect is observed during flight, the PIC shall be responsible to ensure such defect is recorded and reported in the manner established in the operator's operations manual.

- (2) The procedures referred to in sub-regulation (1) shall be extended to include the reporting to the operator of all incidents of exceeding engine or airframe limitations that may occur while the flight crew are embarked on the aeroplane.
- (3) If any report of an incident, as specified in sub-regulation (2), has been received, the operator shall compile and submit a report to the Director within a month of having received such report.

Instrument approach and departure procedures

- **135.07.7** An air service operator may implement instrument approach and departure procedures, other than instrument approach and departure procedures referred to in regulation 91.07.15: Provided that such instrument approach and departure procedures have been approved by
 - (a) the appropriate authority of the State in which such aerodrome is located; or
 - (b) the Director.

IFR or night flight without second-in-command

- **135.07.8** No air service operator may operate an aeroplane without a second-in-command during IFR or night VFR flight unless
 - (a) the aeroplane is -
 - (i) of a certificated maximum mass of less than or equal to 5 700 kg;
 - (ii) is not certificated to carry more than nine passengers; and
 - (iii) not certificated or otherwise required by these Regulations to be flown by two pilots;
 - (b) the operator is authorized to do so in his or her operations specifications; and
 - (c) the operator meets the requirements specified in Document SA-CATS 135.

Reporting of hazardous flight conditions

135.07.9 The PIC of any aeroplane that encounters flight conditions considered to be hazardous to his or her, or another aeroplane, shall report such conditions to any appropriate air traffic services unit as soon as possible, giving such details as may be pertinent to the safety of other aeroplanes.

Refuelling and defuelling with passengers on board

135.07.10 No person shall refuel or defuel any aeroplane when passengers are embarking, disembarking or on board unless the fuelling is carried out in accordance with the procedures specified in Document SA-CATS 135 and such procedures are included in the operator's operations manual.

Reporting acts of unlawful interference

135.07.11 Following an act of unlawful interference, the PIC shall where, in his opinion the safety of persons on board the aeroplane would not be jeopardized, report the events to the nearest ATS authority by the most discrete method possible, by the means devised for such communications.

In-flight simulation of emergencies

135.07.12 No person shall simulate any emergency or abnormal condition during flight that would effectively alter the flight characteristics of the aeroplane or otherwise induce a potentially unsafe safety condition when passengers are on board such aeroplane.

Division Two: Dispatch and flight release rules

Operational control and supervision of flight operations

- **135.07.13** (1) An air service operator shall establish and maintain an operational control system (OCS) that meets the requirements prescribed in Document SA-CATS 135 and which provides operational control services appropriate to the flights being operated.
- (2) An operator who wishes to use flight operations officers (FOOs) in their OCS or who wishes to operate under a Type A OCS as provided in regulation 121.07.13, shall meet the appropriate provisions of Part 121 as follows
 - (a) for the use of FOOs, regulations 121.02.14 and 121.02.15 and Subpart 3, Divisions Four and Five; and
 - (b) for a Type A OCS, Subpart 7, Division Two.

Services for operational control system

135.07.14 An air service operator may use the operational control system of an agent whether domestic or foreign: Provided the service agreement is approved by the Director and the methods, procedures and policies for effecting operational control are described in the operator's operations manual.

Familiarity with technical information

135.07.15 No air service operator shall permit a flight to be released unless the PIC is thoroughly familiar with any technical information relevant to the proposed flight including aeroplane performance, maintenance status, bulletins or operational directives issued by the person responsible for flight operations and that nothing in such information indicates there is a threat to the safety of the flight.

Retention of flight operations documents and reports

- **135.07.16** (1) Unless otherwise specified by the Director, every air service operator shall retain all flight documents made in terms of this Subpart, for a period of not less than 90 days.
- (2) All flight documentation required by this Subpart to be prepared with respect to a flight and which was carried onboard that flight shall be returned to the main base specified in the AOC. Such documentation shall include weather maps and printed information, NOTAMs, cargo and fuel loading sheets and manifests and all paperwork used to record the flight's progress or diversion and irregular or emergency situations.

Maintenance status

135.07.17 No person may dispatch or release an aeroplane unless it is airworthy and all known defects have been rectified and appropriately certified by an aeroplane maintenance engineer except where the dispatch of the aeroplane is in accordance with an approved MEL issued in terms of regulation 135.07.22, a CDL approved by the State of Manufacture or as otherwise permitted in the aeroplane flight manual.

Minimum equipment list

- **135.07.18** (1) No person may conduct a take-off in an aeroplane with instruments or equipment that are not serviceable or that have been removed unless the aeroplane is operated in accordance with a CDL, the provisions specified in the aeroplane flight manual or the conditions or limitations specified in a MEL, which has been approved by the Director and, in the opinion of the PIC, aviation safety will not be compromised.
- (2) An air service operator shall establish a MEL for each type of aeroplane for which a MMEL has been approved by the State of Manufacture of such aeroplane: Provided the State of Manufacture is a Contracting State.
- (3) No operator may operate an aeroplane in accordance with a MEL unless such MEL is carried on board the aeroplane.

Aerodrome operating minima

- **135.07.19** (1) An air service operator shall establish aerodrome operating minima in accordance with the provisions of sub-regulations (2), (3) and (4) in a manner approved by the Director.
- (2) The operator shall establish aerodrome operating minima for each aerodrome planned to be used, which shall not be lower than the values prescribed in technical standard 91.07.5 of Document SA-CATS 91, except as provided in regulation 135.07.33.
- (3) The operator shall ensure that all instrument approaches and departures are conducted in accordance with the procedures approved for such operator in its operations specifications.
- (4) Where an operator is operating at an aerodrome other than a South African aerodrome, the aerodrome operating minima established by the operator may be lower than the minima

established by the appropriate authority of the State in which such aerodrome is located: Provided that –

- (a) the State in which such aerodrome is located approves the lower operating minima; and
- (b) the operator has been authorised in its operations specifications to operate to such lower minima.

Minimum flight altitudes

135.07.20 (1) An air service operator shall establish minimum flight altitudes and the methods to determine such minimum flight altitudes for all route segments to be flown which provide the required terrain clearance, taking into account the operating limitations referred to in Subpart 8 of this Part and the minimum altitudes prescribed in regulation 91.06.32.

- (2) The operator shall take into account the following factors when establishing minimum flight altitudes
 - (a) the accuracy with which the position of the aeroplane can be determined;
 - (b) the probable inaccuracies in the indications of the altimeters used;
 - (c) the characteristics of the terrain along the routes or in the areas where operations are to be conducted:
 - (d) the probability of encountering unfavourable meteorological conditions; and
 - (e) possible inaccuracies in aeronautical charts.
- (3) In complying with the provisions of sub-regulation (2), the operator shall give due consideration to
 - (a) corrections for temperature and pressure variations from standard values;
 - (b) the air traffic control requirements; and
 - (c) any contingencies which may occur along the planned route.

In-flight operational changes to a flight plan

- **135.07.21** (1) An operator shall, when practicable, coordinate with the appropriate air traffic services unit (ATSU) any in-flight operational changes to a current air traffic services flight plan before the operator communicates such changes to the aeroplane.
- (2) When the coordination required by sub-regulation (1) is not practicable, the pilot shall be responsible for obtaining an appropriate approval and clearance from an ATSU, if applicable, before making a change in the flight plan.

Fuel policy

- **135.07.22** (1) An air service operator shall establish a fuel policy that meets the standards prescribed in Document SA-CATS 135 for the purpose of flight planning and in-flight re-planning to ensure that every flight carries sufficient fuel for the planned operation and reserve fuel to cover deviations from the planned operation.
 - (2) The operator shall ensure that the planning of a flight is based upon –
 - (a) procedures, tables or graphs which are contained in or derived from current aeroplanespecific data or the operations manual referred to in regulation 135.04.2;
 - (b) the operating conditions under which the flight is to be conducted, including
 - (i) realistic aeroplane fuel consumption data;
 - (ii) anticipated masses;
 - (iii) expected meteorological conditions;
 - (iv) the effects of loss of facilities or services as identified in NOTAMs; and
 - (v) ATS procedures, restrictions and anticipated delays.
- (3) The operator shall establish policies and procedures with respect to fuel management and publish such policies and procedures in the operations manual referred to in regulation 135.04.2.
- (4) The policies and procedures required by sub-regulation (3) shall, as a minimum, include the requirement that
 - (a) in-flight fuel checks are to be performed at least hourly by or on behalf of the PIC to ensure that the amount of usable fuel remaining in flight is not less than the fuel required to proceed to a suitable aerodrome where a safe landing can be made with the planned final reserve fuel remaining; and
 - (b) the PIC shall declare a situation of urgency when the calculated usable fuel predicted to be available upon landing at the nearest suitable aerodrome where a safe landing can be made is less than the planned final reserve fuel.

Fuel and oil supply and record keeping

135.07.23 The operator shall keep a record of all fuel uplifts, including quantities and types. Record-keeping procedures shall be published in the operations manual and shall be considered a part of the flight documents for record retention as prescribed in sub-regulation 135.07.20.

Operation of aircraft in icing conditions

135.07.24 (1) No person shall conduct a take-off or continue a flight in an aeroplane when icing conditions are reported to exist or are forecast to be encountered along the route to be flown

unless the aeroplane is equipped and the type certificate or the AFM authorises flight in such conditions.

- (2) In no case shall a flight be initiated or continued in icing conditions where in the opinion of the PIC, the conditions experienced may adversely affect the safety of the flight.
- (3) No person shall operate an aeroplane in icing conditions at night unless the aeroplane is equipped with a means to illuminate a representative surface or otherwise detect the formation of ice.

Surface contamination programme

135.07.25 (1) No person shall conduct or attempt to conduct a take-off in an aeroplane that has frost, ice or snow adhering to any of its critical surfaces.

- (2) Notwithstanding sub-regulation (1), a person may conduct a take-off in an aeroplane that has frost adhering to the underside of its wings that is caused by cold-soaked fuel, if the take-off is conducted in accordance with the aeroplane manufacturer's instructions for take-off under such conditions.
- (3) Where conditions are such that frost, ice or snow may reasonably be expected to adhere to the aircraft, no person shall conduct or attempt to conduct a take-off in an aeroplane unless the operator has established an aeroplane inspection programme in accordance with a critical surface contamination programme approved by the Director and the dispatch and take-off of the aircraft are in accordance with that programme.
 - (4) The inspection referred to in sub-regulation (3) shall be performed by –
 - (a) the PIC;
 - (b) a flight crew member of the aircraft who is designated by the PIC; or
 - (c) a person, other than a person referred to in paragraph (a) or (b), who
 - (i) is designated by the operator of the aeroplane; and
 - (ii) has successfully completed a critical surface contamination training programme approved for such the operator.
- (5) Where, before commencing take-off, a crew member of an aeroplane observes that there is frost, ice or snow adhering to the wings of the aeroplane, the crew member shall immediately report that observation to the PIC and the PIC, or a flight crew member designated by the PIC, shall inspect the wings of the aeroplane before take-off.
- (6) Before an aeroplane is de-iced or anti-iced, the PIC of the aeroplane shall ensure that the crew members and passengers are informed of the decision to do so.

(7) An operator is not required to have the programme specified in sub-regulation (3) if it includes a statement in its operations manual that the operator will not dispatch its aeroplane into any region or country where it could be reasonably expected that surface contamination could at anytime form on the aeroplane, while parked or operating on the ground.

Mass and balance control

- **135.07.26** (1) No person shall operate an aeroplane unless, during every phase of the flight, the load restrictions, mass and centre of gravity of the aeroplane conform to the limitations specified in the aeroplane flight manual.
- (2) An air service operator shall have a mass and balance programme that complies with regulation 91.07.11.
- (3) The operator shall specify in its operations manual its mass and balance programme and instructions to employees regarding the preparation and accuracy of mass and balance forms and the load and trim sheet in accordance with regulation 135.04.9.

Inertial navigation and inertial reference systems

135.07.27 No air service operator shall use inertial navigation or reference systems (INS/IRS) unless such operator –

- (c) is authorised to do so in its operations specifications; and
- (b) complies with the INS/IRS requirements prescribed in Document SA-CATS 135.

Low visibility operations

135.07.28 No air service operator shall assign and no person shall conduct a low visibility take-off or Category II or III approach unless –

- (a) the operator meets the conditions prescribed in Document SA-CATS 135;
- (b) the operator is authorised to do so in its operations specifications; and
- (c) the LVO are conducted in accordance with the procedures approved for the operator in its operations manual.

Operations with head-up displays or enhanced vision systems

135.07.29 (1) No air service operator shall use a head-up display (HUD) or enhanced vision system (EVS) unless the operator –

- (a) is authorised to do so in its operations specifications; and
- (b) complies with the HUD or EVS, as applicable, requirements prescribed in Document SA-CAT-OPS-121.

(2) The operator shall include the procedures for use of such equipment in the operations manual referred to in regulation 121.04.2.

Operations with electronic flight bags

- **135.07.30** (1) No air service operator shall use an electronic flight bag (EFB) unless the operator
 - (a) is authorised to do so in its operations specifications; and
 - (b) complies with the EFB requirements prescribed in Document SA-CATS 135.
- (2) The operator shall include the procedures for use of such equipment in the operations manual referred to in regulation 135.04.2.

RVSM – aeroplane monitoring

- **135.07.31** (1) An air service operator authorised to operate in RVSM airspace shall ensure that a minimum of two aeroplanes of each aeroplane type grouping of its fleet have their height-keeping performance monitored at least once every two_years or within intervals of 1 000 flight hours per aeroplane, whichever period is longer: Provided that, if an operator's aeroplane type grouping consists of a single aeroplane, monitoring of that aeroplane shall be accomplished within the specified period.
- (2) The monitoring requirements specified in sub-regulation (1) may be met through the use of data obtained from any air traffic services regional monitoring programme.

Division Three: Cabin safety

Carry-on baggage

- **135.07.32** (1) An air service operator shall establish adequate procedures to ensure that only such baggage is carried onto the aeroplane and taken into the passenger cabin as can be adequately and securely stowed.
- (2) For aeroplanes operated under this Part having a MCM of greater than 5 700 kg, the minimum requirements for the procedures referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 135.

Hold baggage screening

135.07.33 An air service operator engaged in scheduled or international operations shall not carry any originating hold baggage unless such baggage has been screened prior to being loaded into the aircraft in a manner acceptable to the Director.

Securing of passenger cabin and galley

135.07.34 (1) Before take-off and landing and whenever deemed necessary in the interests of aviation safety, the PIC shall ensure that –

- (a) all equipment, baggage and loose articles in the cabin of the aeroplane, including passenger service items and crew members' and passengers' personal effects, are properly secured and stowed so as to avoid the possibility of injury to persons or damage to such aeroplane through the movement of such articles caused by in-flight turbulence or by unusual accelerations or manoeuvres; and
- (b) all aisles, passage ways, exits and escape paths are kept clear of obstructions.
- (2) All solid articles shall be placed in approved stowage areas in the aeroplane, at all times whenever the seat belt lights are illuminated or when so directed by the PIC of such aeroplane.
 - (3) For the purposes of sub-regulation (2), "approved stowage area" means –
 - (a) the area under a passenger seat; or
 - (b) a locker, overhead or other, utilised in accordance with the placarded mass limitation of the locker.
- (4) Where service galleys are made available to the passengers on a self service basis, the cabin briefing shall include a demonstration and safety instructions in the use and stowage procedures of the galley area containing such services.
- (5) No take-off or landing shall be commenced by the PIC of the aeroplane, unless he or she has completed such cabin checks as necessary to ensure the safe condition of the cabin.

Passenger services

- **135.07.35** (1) Except when in use, all items provided for passenger services, including food containers, thermos flasks and servicing trays, shall be carried in their respective stowages and secured against movement likely to cause injury to persons or damage to the aeroplane.
- (2) All items referred to in sub-regulation (1) shall be stowed during take-off and landing or during emergency situations, as directed by the PIC of the aeroplane.
- (3) Any item which cannot be accommodated in the stowage, referred to in sub-regulation (1), shall not be permitted in the cabin of the aeroplane.
- (4) Securing of the cabin shall be completed by the cabin crew members before the approach for landing of the aeroplane is commenced.

Briefing of passengers

- **135.07.36** (1) The PIC shall ensure that passengers are given a safety briefing in accordance with Document SA-CATS 135.
- (2) Where the safety briefing referred to in sub-regulation (1) is insufficient for a passenger because of that passenger's physical, sensory or comprehension limitations or because that passenger is responsible for another person on board the aeroplane, the PIC shall ensure that the passenger is given an individual safety briefing that is appropriate to the passenger's needs.
- (3) The PIC shall ensure that, in the event of an emergency and where time and circumstances permit, all passengers are given an emergency briefing in accordance with the Document SA-CATS 135.

(4) The PIC shall ensure that each passenger who is seated next to an emergency exit is made aware of how to operate that exit.

Safety features card

135.07.37 An air service operator shall provide each passenger, at the passenger's seat, with a safety features card containing, in pictographic form, and any wording shall be in English or as required by the Director and shall contain such information as prescribed by Document SA-CATS 135.

SUBPART 8: AEROPLANE PERFORMANCE OPERATING LIMITATIONS

General requirements

- **135.08.1** (1) Any determination made for the purposes of this Subpart shall be based on approved performance data set out in the aeroplane flight manual for the aeroplane concerned.
- (2) A person may operate an aeroplane without complying with the requirements of this Division if the person
 - (a) is authorized to do so in the air service operator's operations specifications; and
 - (b) complies with the requirements as prescribed in SA-CATS 135.
- (3) Where an operator uses charts or graphs published in the approved aeroplane flight manual, allowance shall be made to ensure any extract errors will be on the side of safety.
- (4) An operator shall adopt obstacle data sufficient to make accurate and safe performance calculations.
- (5) Except as authorised by the Director or as provided in regulation 135.07.5, single-engine aeroplanes shall only be operated in conditions of weather and light, and over such routes and diversions therefrom, that permit a forced landing to be executed in the event of engine failure.
- (6) An aeroplane shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.
- (7) A flight shall not be commenced unless the performance information provided in the flight manual, supplemented as necessary with other data acceptable to the Director, indicates that the standards prescribed in this Subpart can be complied with for the flight to be undertaken.
- (8) In complying with any of the provisions in this Subpart, all factors that significantly affect the performance of the aeroplane, as applicable to the phase of flight, shall be taken into account and which shall include as a minimum
 - (a) the mass of the aeroplane;
 - (b) the operating procedures employed by the operator;
 - (c) the pressure-altitude appropriate to the elevation of the aerodrome;
 - (d) the ambient temperature;
 - (e) the wind;

- (f) the runway slope; and
- (g) the surface conditions of the runway.
- (9) The factors specified in sub-regulation (6) shall be taken into account either directly as operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.

Take-off mass limitations

135.08.2 (1) No person shall conduct a take-off in an aeroplane if the mass of the aeroplane –

- exceeds the maximum take-off mass specified in the aeroplane flight manual for the pressure altitude and the ambient temperature at the aerodrome where the take-off is to be made; or
- (b) after allowing for planned fuel consumption during the flight to the destination aerodrome or alternate aerodrome, exceeds the landing mass specified in the aeroplane flight manual for the pressure altitude and the ambient temperature at the destination aerodrome or alternate aerodrome.
- (2) In the determination of the maximum take-off mass referred to in sub-regulation (1) –
- (a) the required accelerate-stop distance shall not exceed the accelerate-stop distance available (ASDA);
- (b) the required take-off run shall not exceed the take-off run available (TORA); and
- (c) the required take-off distance shall not exceed the take-off distance available (TODA).
- (3) For the purposes of sub-regulation (2), the factors to be taken into account are –
- (a) mass of the aeroplane;
- (b) specific operating procedures;
- (c) the pressure altitude at the aerodrome;
- (b) the ambient temperature;
- (c) the runway slope in the direction of take-off;
- (d) not more than 50 per cent of the reported headwind component or not less than 150 per cent of the reported tailwind component;
- (e) loss of effective TORA during runway alignment except where rolling take offs are approved; and

- (f) where the runway condition is other than bare and dry, the appropriate penalty based upon the runway condition or contaminates such as slope, ice, snow, slush, standing water or water surfaces for seaplanes shall be factored into the performance calculation; and
- (g) any other factor that may significantly affect aeroplane performance.

Net take-off flight path

- **135.08.3** (1) No person shall conduct a take-off in an aeroplane if the mass of the aeroplane is greater than the mass specified in the aeroplane flight manual as allowing a net take-off flight path that clears all obstacles by at least 35 feet vertically or at least 62 meters horizontally within the aerodrome boundaries and by at least 95 meters horizontally outside those boundaries.
- (2) In the determination of the maximum mass, minimum distances and flight path referred to in sub-regulation (1)
 - (a) corrections shall be made for -
 - (i) the runway to be used;
 - (ii) the runway slope in the direction of take-off;
 - (iii) the pressure-altitude at the aerodrome;
 - (iv) the ambient temperature; and
 - (v) the wind component at the time of take-off, where not more than 50 per cent of the reported headwind component or not less than 150 per cent of the reported tailwind component may be considered; and
 - (b) calculations shall be based on the pilot
 - (i) not banking the aeroplane before reaching an altitude of 50 feet;
 - (ii) subject to sub-regulation (3), using 15 degrees or less of bank at or below 400 feet; and
 - (iii) using not more than 25 degrees of bank thereafter, aeroplane speed and configuration permitting.
- (3) A bank angle greater than the 15 degrees referred to in sub-regulation (2)(b)(ii) may be used if it is authorized by the Director.

En route limitations with single-engine aeroplanes

135.08.4 An air service operator shall not operate a single-engine aeroplane in IMC over any route unless it is capable of meeting the requirements of regulation 135.07.1(3)(a) in the event of an engine failure.

En route limitations with one engine inoperative

- **135.08.5** (1) An air service operator shall not operate a twin-engine aeroplane in IMC over any route if the weight of the aeroplane is greater than the weight that will allow the aeroplane to meet the requirements of regulation 135.07.1(3)(b) in the event of an engine failure.
- (2) An operator shall not operate a twin-engine aeroplane in VMC over any route if the weight of the aeroplane is greater than the weight that will allow the aeroplane when operating in VFR flight, to maintain at least 500 feet above the surface in the event of an engine failure.

En route limitations with more than one engine inoperative

135.08.6 An air service operator shall not operate an aeroplane equipped with more than two engines in IMC over any route if the weight of the aeroplane is greater than the weight that will allow the aeroplane to meet the requirements of regulation 135.07.1(3)(c) in the event of the failure of two engines.

Dispatch limitations: landing at destination and alternate aerodromes

135.08.7 (1) Subject to sub-regulation (3), no person shall dispatch or conduct a take-off in an aeroplane unless –

- (a) the mass of the aeroplane on landing at the destination aerodrome will allow a full-stop landing
 - (i) in the case of any turbojet- or turbofan-powered aeroplane, within 60 per cent of the landing distance available (LDA), or
 - (ii) in the case of a large propeller-driven aeroplane, within 70 per cent of the LDA; and
- (b) the mass of the aeroplane on landing at any alternate aerodrome will allow a full-stop landing
 - (i) in the case of a turbojet- or turbofan-powered aeroplane, within 60 per cent of the LDA, and
 - (ii) in the case of a propeller-driven aeroplane, within 70 per cent of the LDA.
- (2) In determining whether an aeroplane can be dispatched or a take-off can be conducted in accordance with sub-regulation (1), the following shall be taken into account –

- (a) the pressure altitude at the destination aerodrome and at the alternate aerodrome, if such pressure altitude can be determined;
- (b) not more than 50 per cent of the reported headwind component or not less than 150 per cent of the reported tailwind component may be used in computing distances for take-off or landing; and
- (c) that the aeroplane shall be landed on a suitable runway, considering the wind speed and direction, the ground handling characteristics of the aeroplane and other conditions such as landing aids and terrain.
- (3) Where conditions at the destination aerodrome at the time of take-off do not permit compliance with sub-regulation (2)(c), an aeroplane may be dispatched and a take-off conducted if the alternate aerodrome designated in the OFP permits, at the time of take-off, compliance with sub-regulations (1)(b) and (2).
- (4) Where the aerodrome of intended landing has in place noise criteria that may require a landing mass reduction, the take off mass shall be adjusted to comply with such limitations.

Dispatch limitations: wet runway – turbojet- or turbofan-powered aeroplanes

- **135.08.8** (1) Subject to sub-regulation (2), when weather reports or forecasts indicate that the runway may be wet at the estimated time of arrival, no air service operator shall dispatch, and no PIC shall conduct a take-off in a turbojet- or turbofan-powered aeroplane unless the landing distance available (LDA) at the destination aerodrome is at least 115 per cent of the landing distance required in terms of regulation 135.08.7(1)(a).
- (2) The landing distance available on a wet runway may be shorter than that required by sub-regulation (1) but not shorter than that required by regulation 135.08.7, if the aeroplane flight manual includes specific information about landing distances on wet runways

SUBPART 9: MAINTENANCE CONTROL

General

- **135.09.1** (1) An air service operator shall not operate any aeroplane under this Part unless such aeroplane is maintained in accordance with Part 43.
- (2) An air service operator shall ensure that the aeroplane is maintained in accordance with an approved aeroplane maintenance programme.
 - (3) An operator may contract its maintenance out as provided in regulation 135.09.3.
- (4) The maintenance programme referred to in sub-regulation (2) shall contain the information required by regulation 135.09.2(1) and be provided to the maintenance personnel concerned and such other personnel as may be required.

Aeroplane maintenance programme

- **135.09.2** (1) The maintenance programme referred to in regulation 135.09.1(2) shall be developed for each aeroplane and shall contain the following information
 - (a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;
 - (b) when applicable, a continuing structural integrity programme;
 - (c) procedures for changing or deviating from paragraphs (a) and (b) above; and
 - (d) when applicable, condition monitoring and reliability programme descriptions for aircraft systems, components and powerplants.
- (2) Maintenance tasks and intervals that have been specified as mandatory in approval of the type design shall be identified as such.
- (3) The design and application of the maintenance programme shall observe human factors principles.
- (4) Upon approval of the Director, copies of all amendments to the maintenance programme shall be furnished promptly to all organisations or persons to whom the maintenance programme has been issued.

Maintenance contracted to approved AMO

- **135.09.3** (1) An air service operator contracting its maintenance out as provided in regulation 135.09.1(3) shall ensure such contract is with the holder of an AMO approval with the appropriate rating issued in terms of Part 145.
- (2) The operator shall implement a system of quality assurance to ensure that all maintenance is carried out by the contracted organisation as provided in the contract.

Operator's maintenance responsibilities

135.09.4 (1) An air service operator shall establish procedures acceptable to the Director that ensure –

- (a) each aeroplane they operate is maintained in an airworthy condition;
- (b) the operational and emergency equipment necessary for an intended flight are serviceable; and
- (c) the Certificate of Airworthiness of each aeroplane they operate, including any appropriate special conditions, remains valid.
- (2) The operator shall not operate an aeroplane unless it is maintained and released to service by an organisation designated in accordance with Part 145 in the manner referred to in regulation 135.09.3.
- (3) The operator shall be resourced sufficiently to ensure that all maintenance is carried out in accordance with the maintenance control manual referred to in regulation 135.09.5.

Operator's maintenance control manual

- **135.09.5** (1) An air service operator shall provide a maintenance control manual (MCM) that meets the requirements prescribed in Document SA-CATS 43 for the use and guidance of the maintenance and operational personnel concerned.
- (2) The MCM referred to in sub-regulation (1) shall incorporate relevant principles of human factors.
- (3) If the operator develops a separate MCM as part of the operations manual system, two copies of the proposed MCM shall be provided to the Director.
- (4) The operator shall amend its MCM as necessary in accordance with the amendment procedures contained in the MCM, in order to keep the information contained therein up-to-date and accurately reflect company policy with respect to the maintenance of its aeroplanes. The operator shall forward two copies of all amendments to the MCM to the Director for approval.
- (5) Upon receipt of any approved amendments, each holder of an MCM shall be furnished a copy of such amendment with clear instructions to insert the amended pages in a timely manner into the MCM.
- (6) The Director may require an operator to produce an amendment where he or she is of the opinion that the MCM requires updating.

Maintenance records

135.09.6 (1) The following records shall be kept for each aeroplane for the periods prescribed in sub-regulation (3) –

- (a) the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life limited components;
- (b) the current status of compliance with all mandatory continuing airworthiness information;
- (c) appropriate details of modifications and repairs;
- (d) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components subject to a mandatory overhaul life;
- (e) the current status of the aeroplane's compliance with the maintenance programme; and
- (f) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
- (2) An operator shall describe in its maintenance control manual who is responsible for the retention of the records required by sub-regulation (1) and where they will be kept.
- (3) The records in sub-regulation (1)(a) to (e) shall be kept for a minimum period of 6 months after the unit to which they refer has been permanently withdrawn from service and the records in sub-regulation (1)(f) for a minimum period of 5 years after the signing of the maintenance release.

Continuing airworthiness information

135.09.7 (1) An air service operator operating aeroplanes in excess of 5 700 kg MCM shall, describe in its maintenance control manual —

- (a) who is responsible to monitor and assess maintenance and operational experience with respect to continuing airworthiness and obtain such other information that the Director prescribes; and
- (b) who shall report such information to the Director using a reporting system developed for that purpose.
- (2) The Director shall transmit all mandatory continuing airworthiness information reported to him or her in accordance with sub-regulation (1) to the State of Design of any aeroplane that has been issued a South African Certificate of Airworthiness and operated in terms of this Part.
- (3) The operator shall describe in its MCM who is responsible to obtain and assess continuing airworthiness information and recommendations issued by an aeroplane manufacturer, the organisation responsible for the aeroplane type design or by the State of Design, or any additional requirements issued by the Director for each type of aeroplane operated under this Part and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the Director.

Modifications and repairs

- **135.09.8** (1) All modifications and repairs shall comply with airworthiness requirements acceptable to the Director.
- (2) Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

SUBPART 10: SAFETY MANAGEMENT AND QUALITY SYSTEMS

Division One: Safety management system

Requirement for safety management system

- **135.10.1** (1) An air service operator shall ensure it maintains an acceptable level of safety by establishing and maintaining a SMS that meets the requirements of this Subpart and is approved by the Director.
 - (2) The operator shall adhere to its approved SMS.

Components of safety management system

135.10.2 A SMS shall include -

- (a) a safety policy on which the system is based expressing a firm commitment to all elements of the programme, including financial and human resources, that the accountable executive has approved and communicated to all employees;
- (b) a process for defining expected levels of safety performance and setting safety targets for the improvement of aviation safety and for measuring the attainment of those targets;
- (c) a process for identifying hazards to aviation safety and for evaluating and managing the associated risks;
- (d) a process for the early alerting of the persons responsible for operations about known or suspected hazards that would require immediate safety resolution action to be taken through the operational or maintenance control systems;
- (e) a reporting system for reporting safety concerns that, to the extent possible guarantees anonymity of the person making the report;
- a policy and process defining the conditions under which immunity from disciplinary action against any person who reports a known or suspected hazard or is involved in an occurrence will apply;
- (g) a process for conducting periodic scheduled reviews or audits of the SMS in accordance with the quality management system as provided in regulation 135.10.8(2)(a);
- (h) a process for the investigation of accidents and incidents for the purposes of implementing reactive safety measures;

- (i) a process of enhancing safety awareness through communication and safety promotion and a feedback system of reporting safety actions and outcomes;
- (j) scheduled safety meetings, a means of informing interested parties of those meetings and a means of informing company personnel of relevant information and actions arising out of such meetings;

Development and approval of safety management manual

- **135.10.3** (1) Except as provided in sub-regulation (2), an air service operator shall establish a safety management manual (SMM), either as a part of the operations manual system or a stand alone document, that is as prescribed in Document SA-CATS 135.
- (2) The operator's SMM shall be submitted to the Director for approval and shall included at least
 - (a) a process for safety performance measurement of the SMS which includes verification of safety performance indicators and safety performance targets;
 - (b) procedures for analysing, assessing and controlling hazards and safety risks in operations and for taking corrective actions;
 - (c) training programme requirements for the persons responsible for operations and other personnel assigned duties under the SMS; and
 - (d) procedures for making progress reports to the accountable executive at intervals determined by the accountable manager and other reports as needed in urgent cases.

Establishment and structure of safety management system

- **135.10.4** (1) The establishment of a SMS shall be as prescribed in Document SA-CATS 135 and be the responsibility of the chief executive officer (CEO) specified in regulation 135.06.2(5)(a) who, irrespective of other functions, shall have ultimate responsibility and accountability for the implementation and maintenance of the SMS.
- (2) An air service operator shall submit for the approval of the Director an air safety officer (ASO), as specified in regulation 135.06.2(5)(d), who meets the qualifications of and performs the functions specified in technical standard 135.06.2 of Document SA-CATS 135.
- (3) The ASO shall be responsible to the CEO for the implementation and administration of the SMS.
- (4) The ASO shall, where necessary, appoint sufficient personnel to fill the key positions identified by the SMS in consideration of the scope, size and complexity of the operation and to prescribe their authority, responsibilities and lines of reporting.
- (5) The ASO shall be responsible for the review of safety data and assessment of all analytical information, the development of corrective recommendations arising from such reviews and the presentation of corrective recommendations to the chief executive officer and the person responsible for operations. The person responsible for operations shall be

responsible for the final development and implementation of all corrective action plans in a manner that will ensure the timely resolution of safety issues.

(6) Where the person responsible for operations has delegated any responsibility held under these regulations to another person, such person shall keep the respective manager currently informed. The respective manager shall maintain responsibility for the corrective action plans arising out of the SMS.

Holder of more than one certificate

- **135.10.5** (1) The holder of an AOC issued in terms of this Part who is also the holder of an approved maintenance organisation certificate issued under Part 145, shall adhere to the requirements prescribed in Part 145 with respect to a SMS when undertaking maintenance control activities.
- (2) An operator who holds a certificate under more than one Part in these Regulations for which an SMS is required may integrate the requirements of these Parts into one SMS.

Size and complexity

135.10.6 The size and complexity of an approved SMS shall be determined by the Director and measured in terms of scope and size as well as the hazards and risks associated with the activities being carried out by the certificate holder.

Division Two: Quality management system

Requirements for quality management system

135.10.7 (1) An air service operator shall establish a quality management system (QMS) that meets the requirements prescribed in Document SA-CATS 135.

- (2) The quality system shall –
- (a) include a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards and procedures; and
- (b) be described in relevant documentation as prescribed in Document SA-CATS 135.
- (3) The operator shall designate a person responsible for the QMS who meets the qualifications and experience requirements and who will be responsible for the functions as prescribed in technical standard 135.06.2 of Document SA-CATS 135.
- (4) The operator shall prepare a quality management manual that meets the requirements prescribed in Document SA-CATS 135.
- (5) Notwithstanding sub-regulation (3) above, the operator may appoint two quality managers, one for flight operations and one for maintenance: Provided the operator has designated one single quality management unit to ensure that the quality system is applied uniformly throughout the entire operation.

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SUBPART 1: GENERAL

Applicability

136.01.1 (1) This Part applies to –

- (a) free balloons engaged in commercial air transport operations within the Republic;
- (b) persons acting as flight crew members of a free balloon registered in the Republic; and
- (c) persons who are on board a free balloon operated under this Part.

- (2) For purposes of this Part, a free balloon registered in another State and operated by the holder of an operating certificate issued in the Republic, shall be deemed to be registered in the Republic.
- (3) The provisions of Part 91 shall with the necessary changes apply to free balloons operated in terms of this Part.

Intoxication

- **136.01.2** (1) A person shall not enter or be allowed to enter a free balloon while under the influence of alcohol or a drug having a narcotic effect, to the extent where the safety of such balloon or its occupants is, or is likely to be, endangered.
- (2) The operator shall establish procedures to ensure that any person referred to in sub-regulation (1) is
 - (a) refused embarkation; or
 - (b) if such person is on board, restrained or disembarked.

Dry lease-in of free balloons

- **136.01.3** (1) An operator who intends to dry lease-in a free balloon for commercial air transport purposes, shall
 - (a) ensure that such balloon can be operated and is operated in accordance with the requirements prescribed in this Part; and
 - (b) obtain prior approval from the Director to operate such balloon.
- (2) The approval referred to in sub-regulation (1)(b) shall, subject to such conditions as the Director may determine, be granted if such balloon is
 - (a) type certificated in accordance with the requirements prescribed in Part 21;
 - (b) maintained in accordance with a balloon maintenance schedule referred to in regulation 136.09.2; and
 - (c) operated under the operating certificate held by the operator referred to in sub-regulation (1).
- (3) The conditions of approval referred to in sub-regulation (2) shall be part of the lease agreement between the operator referred to in sub regulation (1) and the person from which the free balloon is leased.

Wet lease-in of free balloons

- **136.01.4** (1) An operator who intends to wet lease-in a foreign registered free balloon for commercial air transport purposes shall, subject to such conditions as the Director may determine, obtain prior approval from the Director to operate such balloon.
- (2) The duration of the lease agreement concerned shall be limited to a maximum period of six calendar months in one year.
- (3) The approval referred to in sub-regulation (1) shall, be granted if such balloon
 - (a) is wet leased-in from an operator who is the holder of an operating certificate or similar document issued by an appropriate authority;
 - (b) has been type certificated by the appropriate authority;
 - (c) holds a valid certificate of airworthiness or similar document issued by such appropriate authority;
 - (d) is maintained and operated in accordance with safety standards at least equivalent to the safety standards referred to in this Part; and
 - (e) will be operated in terms of the operating certificate or similar document held by the operator referred to in paragraph (a).
- (4) The operator referred to in sub-regulation (1) shall
 - (a) satisfy the Director that the safety standards of the lessor are not less than the safety standards referred to in this Part; and
 - (b) ensure that any law applicable to the balloon to be wet leased-in, the maintenance or operation thereof, is complied with.
- (5) The total number of wet leased-in free balloons shall be such that an operator referred to in sub-regulation (1) will not be predominantly dependent on foreign registered free balloons.
- (6) The conditions of approval referred to in sub-regulation (1) shall be part of the lease agreement between the operator referred to in sub-regulation (1) and the operator from which the foreign registered free balloon is leased.

Dry lease-out of free balloons

- **136.01.5** (1) Subject to the provisions of sub-regulation (2), the operator of a South African registered balloon may dry lease-out the balloon to any operator in a Contracting State.
- (2) On request of the operator of a South African registered free balloon, the Director may exempt the operator from the applicable provisions of this Part and remove the balloon from the operating certificate held by such operator: Provided that –

- (a) the appropriate authority of the State of Operator to which such balloon is dry leased has accepted, in writing, responsibility for surveillance of the maintenance and operation of such balloon; and
- (b) such balloon is maintained according to an approved maintenance programme.

Wet lease-out of free balloons

136.01.6 The operator of a South African registered free balloon who intends to wet lease-out the balloon to any operator, other than an operator of a contracting State, shall remain the operator of the balloon for purposes of Subpart 6, and responsibility for surveillance of the maintenance and operation of such balloon shall not be transferred to the appropriate authority of the State of operator to which such balloon is wet leased-out.

Leasing of a free balloon between two South African operators

- **136.01.7** (1) A South African operator who intends to wet lease-out a free balloon to another South African operator, shall remain the operator of the balloon and shall retain the functions and responsibilities prescribed in Subpart 6.
- (2) A South African operator, who intends to utilise a free balloon leased from, or to lease it to another South African operator, shall obtain prior approval from the Director for the operation, and the conditions of approval shall be part of the lease agreement between the operators.
- (3) The terms of an approved lease agreement, other than an agreement in terms of which a free balloon together with crew is leased, and where no transfer of functions and responsibilities is intended, shall include
 - (a) the arrangement concerning the operating certificate under which the flights with the leased free balloon shall be operated; and
 - (b) any deviation from the operating certificate under which the flights with the leased free balloon shall be operated.

Sub-chartering

- **136.01.8** (1) In exceptional circumstances as prescribed in Document SA-CATS 136, an operator may sub-charter a free balloon and crew from any operator who holds a valid operating certificate for the balloon, issued by an appropriate authority: Provided that
 - (a) the sub-charter period does not exceed five consecutive days; and
 - (b) the operator of the balloon so sub-chartered informs the Director, within 24 hours, of such sub-charter.

(2) The provision of regulations 136.01.3 (1)(a) and (2), 136.01.4 (3) and (4)(b) and 136.01.7 (1) and (3) shall apply with the necessary changes to any sub-charter referred to in this regulation.

Preservation of documents

136.01.9 The operator of a commercial air transport balloon who is required to retain any of the documents for the specified period referred to in subpart 4, shall retain such documents for such specified period irrespective of the fact that such operator, before the expiry of such specified period, ceases to be the owner or possessor of the balloon concerned.

SUBPART 2: FLIGHT CREW

Composition of flight crew

- **136.02.1** (1) A minimum of one flight crew member shall be required for the operation of a commercial air transport balloon.
- (2) The operator shall ensure that the flight crew member
 - (a) is competent to perform the duties assigned to them; and
 - (b) holds the appropriate valid licences and ratings.
- (3) The flight crew member shall hold a valid radiotelephony operator licence or an equivalent document issued by an appropriate authority, authorising such member to operate the type of radio transmitting equipment to be used.
- (4) The operator shall designate a PIC and the PIC may delegate the conduct of the flight to another suitably qualified pilot.

Flight crew member emergency duties

- **136.02.2** (1) An operator, and where appropriate, the PIC of a commercial air transport balloon, shall perform the necessary duties in an emergency or a situation requiring emergency evacuation.
- (2) The functions referred to in sub-regulation (1) shall be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration the possible incapacitation of individual flight crew members.
- (3) A flight crew member shall not accept an assignment of emergency functions unless such flight crew member has been trained to perform emergency functions in accordance with the requirements prescribed in Part 69.

Flight time and duty periods

136.02.3 Flight crew members shall -

- (a) not work more than seven consecutive days between days off;
- (b) have two consecutive days off in any consecutive fourteen days;
- (c) have a minimum of six days off in any consecutive four weeks;
- (d) have an average of at least eight days off in each consecutive four week period, averaged over three such periods.

SUBPART 3: DOCUMENTATION AND RECORDS

Documents to be retained on ground

136.03.1 The operator of a commercial air transport free balloon shall ensure that the load sheet, the passenger list, the special loads notification, if applicable, shall be retained for a period of at least 90 days.

Operations manual

136.03.2 (1) The operator of a commercial air transport free balloon shall draw up an operations manual containing all the information required under this part and setting out the manner in which such operator will operate the air service for which such operator is licensed in terms of the International Air Services Act, 1993 or the Air Services Licensing Act, 1990 as the case may be.

- (2) The operator shall submit the operations manual in duplicate to the Director for approval.
- (3) If the Director is satisfied that the operator
 - (a) will comply with the provisions of regulation 136.06.7; and
 - (b) will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, 1993 or the Air Services Licensing Act, 1990,

the Director shall certify in writing on both copies of the operations manual that such manual has been approved, and shall return one copy of the approved operations manual to the operator.

- (4) The operator shall submit any amendment of an approved operations manual in duplicate to the Director for approval.
- (5) If the Director is satisfied that the operator will comply with the provisions of subregulation (3)(a) and (b), the Director shall certify in writing on both copies of the amendment to the approved operations manual that such amendment has been approved, and shall return one copy of the approved amendment to the operator.

- (6) The operator shall at all times operate the commercial air transport balloon in accordance with the approved operations manual or an approved amendment thereto.
- (7) The operator shall
 - (a) ensure that all operations personnel are able to understand the technical language used in those sections of the operations manual which pertain to their duties;
 - (b) ensure that every flight is conducted in accordance with the operations manual and that those parts of the operations manual which are required for the conduct of a flight, are easily accessible to the flight crew members on board;
 - (c) make the operations manual available for the use and guidance of operations personnel;
 - (d) provide the flight crew members with their own personal copy of the sections of the operations manual which are relevant to the duties assigned to them:
 - (e) keep the operations manual up to date; and
 - (f) keep the operations manual in a safe place.
- (8) The contents of the operations manual shall not contravene the conditions contained in the operating certificate issued to the operator in terms of regulation 121.06.3.
- (9) The structure and contents of the operations manual referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 136.

Balloon operating manual

- **136.03.3** (1) The operator of a commercial air transport free balloon shall make use of, and make available a balloon operating manual for use by the flight crew members in such operator's employ.
- (2) The manual shall contain the normal, abnormal and emergency procedures relating to the balloon.
- (3) The operator shall provide each flight crew member with a copy of those parts of the balloon operating manual, which are relevant to the operational duties assigned to such flight crew member.
- (4) The operator shall ensure that the balloon operating manual is provided in a hard copy or in an approved electronic format.
- (5) The balloon operating manual shall be referred to in the operations manual referred in regulation 136.02.2.

Balloon flight manual

- **136.03.4** (1) The operator of a commercial air transport free balloon shall keep a current approved balloon flight manual for each balloon of which he or she is the operator.
- (2) The balloon flight manual referred to in sub-regulation (1) may be included in the balloon operating manual referred to in regulation 136.03.3.

Flight time and duty period records

- **136.04.5** (1) The operator of a commercial air transport free balloon shall
 - (a) maintain current flight time and duty period records of all flight crew members in such operator's employ; and
 - (b) retain the flight time and duty period records for a period of 15 calendar months calculated from the date of the last flight of each flight crew member.
- (2) A flight crew member in the part-time employ of an operator shall maintain his or her own flight time and duty period records and shall provide copies thereof to the operator to enable such operator to ensure that such flight crew member does not exceed the limits prescribed in the flight time and duty scheme of the operator referred to in regulation 136.02.5.

Records of emergency and equipment

- **136.03.6** (1) The operator of a commercial air transport free balloon shall compile a list of all the emergency equipment to be carried in the balloon and shall have such list available at all times for immediate communication to rescue co-ordination centres.
- (2) The emergency equipment list shall be included in the operations manual referred to in regulation 136.03.2.
- (3) The format and minimum information to be included in the emergency equipment list shall be as prescribed in Document SA-CATS 136.

Flight crew member training records

- **136.03.7** (1) The operator of a commercial air transport free balloon shall maintain the records of all training and proficiency checks undertaken by the flight crew members in such operator's employ, and such records shall incorporate certificates indicating the successful completion of such training and proficiency checks.
- (2) The operator shall retain the record of each flight deck crew member for a period of at least three years and the record of all other flight crew members for a period of at least 12 months from the date on which the flight crew member concerned has left the employ of such operator.

(3) The certificates referred to in sub-regulation (1) shall be made available by the operator to the flight crew member concerned on request.

Load sheet

- **136.03.8** (1) The operator of a commercial air transport free balloon registered or operated in the Republic shall complete a load sheet.
- (2) A load sheet shall be completed in duplicate and one copy shall be carried in the balloon and one copy shall be retained in accordance with the provisions of Regulation 136.03.1.
- (3) The load sheet shall be retained by the operator for a period of at least 90 days calculated from the date on which the flight was undertaken.
- (4) The minimum contents of a load sheet shall be prescribed in Document SA-CATS 136.

SUBPART 4: BALLOON INSTRUMENT AND EQUIPMENT

Approval of instruments and equipment

- **136.04.1** (1) The operator of a commercial air transport free balloon shall ensure that a flight does not commence unless the instruments and equipment required under this subpart, or otherwise installed on the balloon, are, subject to the provisions of sub-regulation (2), approved and installed in accordance with the requirements, including operational and airworthiness requirements applicable to such instruments and equipment.
- (2) The operator shall not be required to obtain approval for the
 - (a) accurate time piece referred to in regulations 91.04.4 and 91.04.5;
 - (b) first aid equipment referred to in regulation 91.04.16;
 - (c) flight, navigation and associated equipment for balloons operated under VFR; and
 - (d) fire fighting equipment.

Flight, navigation and associated equipment for balloon operated under VFR

136.04.2 The operator of a commercial air transport balloon shall not operate the balloon in accordance with VFR, unless such balloon is equipped with –

- (a) an accurate time-piece showing the time in hours, minutes and seconds;
- (b) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight;
- (c) a vertical-speed indicator;

- (d) a fusible temperature link and a permanent maximum temperature label to be installed:
- (e) fuel pressure gauge and fuel content indicator;
- (f) handling line;
- (g) fire extinguisher; and
- (h) first aid kit as prescribed in Document SA-CATS 136 specifically for balloons.

SUBPART 5: OPERATING CERTIFICATE

Operating certificate

136.05.1 The operator of a commercial air transport free balloon shall not operate the balloon unless such operator is the holder of a valid –

- (a) licence issued in terms of the Air Services Licensing Act, 1990, or the International Air Services Act, 1993; and
- (b) operating certificate issued in terms of regulation 136.05.3.

Application for operating certificate

136.05.2 An application for an operating certificate shall be made to the Director in the appropriate prescribed form and shall be accompanied by the appropriate fee as prescribed in Part 187.

Adjudication of application for operating certificate

- **136.05.3** (1) In considering an application referred to in regulation 136.05.2, the Director may conduct the investigation he or she considers necessary.
- (2) The Director shall grant an application and issue the operating certificate if the Director is satisfied that
 - (a) the applicant will comply with the provisions of regulation 136.05.7; and
 - (b) the applicant will not operate the air service concerned contrary to any provision of the Act, the International Air Services Act, 1993 and the Air Service Licensing Act, 1990.
- (3) If the Director is not so satisfied, he or she shall notify the operator thereof, stating the reasons in the notification, and grant the operator the opportunity to rectify or supplement any defect within the period determined by the Director, after which period the Director shall consider the application concerned.
- (4) An operating certificate shall be issued on the appropriate prescribed form, under such conditions which the Director may determine.

Period of validity of operating certificate

- **136.05.4** (1) An operating certificate shall be valid for such period as may be determined by the Director: Provided that such period shall not exceed a period of 12 months from the date of issuing thereof.
- (2) If the holder of an operating certificate applies at least 30 days prior to the expiry thereof for a new operating certificate, the existing operating certificate shall, notwithstanding the provisions of sub regulation (1), remain in force until such holder is notified by the Director of the result of the application for the issuing of a new operating certificate.

Safety inspections and audits

- **136.05.5** (1) An applicant for the issuing of an operating certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of an application made in terms of regulation 136.05.2.
- (2) The holder of an operating certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this part.

Duties of holder of operating certificate

136.05.6 The holder of an operating certificate shall –

- (a) notify the Director in the manner prescribed in Document SA-CATS 136 before any change is effected to the particulars of the operating certificate; and
- (b) keep the operating certificate in a safe place and produce such operating certificate to an authorised officer, inspector or authorised person for inspection if so requested by such officer, inspector or person.

Register of operating certificates

136.05.7 (1) The Director shall maintain a register of all operating certificates issued in terms of this Part.

- (2) The register shall contain the following particulars:
 - (a) The full name and, if any, the trade name of the holder of the operating certificate;
 - (b) The postal address of the holder of the operating certificate:
 - (c) The number of the operating certificate issued to the holder;
 - (d) Particulars of the type of air service for which the operating certificate is issued:

- (e) Particulars of the category of balloons for which the operating certificate was issued: and
- (f) The date on which the operating certificate was issued.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within 30 days from the date on which the operating certificate was issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 6: FLIGHT OPERATIONS

Establishment of procedures

- **136.06.1** The operator of a commercial air transport free balloon shall
 - (a) establish procedures and instructions, for each balloon type, containing ground personnel and flight crew member's duties for all types of operations on the ground and in flight; and
 - (b) establish a checklist system to be used by flight deck crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that the operating procedures in the operations manual referred to in regulation 136.03.2, are followed.

Operational control and supervision

136.06.2 The operator of a commercial air transport free balloon shall exercise operational control and establish and maintain an approved method of supervision of flight operations.

Competence of operations personnel

136.06.3 The operator of a commercial air transport free balloon shall ensure that all personnel assigned to or directly involved in ground and flight operations, are properly instructed, have demonstrated their abilities in their particular duties and are aware of their responsibilities and the relationship of such duties to the operation as a whole.

Use of air traffic services

136.06.4 The operator of a commercial air transport free balloon shall ensure that air traffic services are used for all flights whenever applicable.

Smoking in, or in the vicinity of a balloon

- **136.06.5** (1) No person shall smoke in and within a 10m radius around a free balloon.
- (2) The operator shall display signs indicating "No Smoking" in relevant areas.

Fuel policy

- **136.06.6** (1) The operator of a commercial air transport free balloon shall establish a fuel policy for the purpose of flight planning and in-flight pre-planning to ensure that every flight carries sufficient fuel for the planned operation and reserve fuel to cover deviations from the planned operation.
- (2) The operator shall ensure that the planning of a flight is only based upon—
 - (a) procedures, tables or graphs which are contained in or derived from the operations manual referred to in regulation 136.03.2, or current free balloon-specific data; and
 - (b) the operating conditions under which the flight is to be conducted, including
 - (i) realistic free balloon fuel consumption data;
 - (ii) anticipated masses; and
 - (iii) expected meteorological conditions.

Fuel supply

136.06.7 The operator of a commercial air transport free balloon shall establish a procedure to ensure that in-flight fuel checks and fuel management are carried out.

Carriage of children

136.06.8 The operator of a commercial air transport free balloon shall ensure that a child younger than seven years is only carried when all the conditions as prescribed in the operations manual have been met.

Carriage of passengers with disability

- **136.06.9** (1) The operator of a commercial air transport free balloon shall establish procedures, including identification, seating positions and handling in the event of an emergency, for the carriage of passengers with disability.
- (2) The operator shall ensure that
 - (a) the PIC of the free balloon is notified when a passenger with a disability is to be carried on board:

- (b) individual briefings on emergency procedures are given to a passenger with a disability and his or her able-bodied assistant, appropriate to the needs of such passenger; and
- (c) the person giving the briefing shall enquire as to the most appropriate manner of assisting the passenger with a disability so as to prevent pain or injury to such passenger.
- (3) A mentally disturbed person shall not be carried in the balloon unless
 - (a) he or she is accompanied by an able-bodied assistant; and
 - (b) a medical certificate has been issued by a medical practitioner certifying such mentally disturbed person's suitability for carriage by air, and confirming that there is no risk of violence from such person.
- (4) An operator shall undertake the carriage of a mentally disturbed person who, according to his or her medical history, may become violent, only after special permission has been obtained from the Director by such operator.
- (5) A passenger with a disability may travel unaccompanied provided he or she is able to assist himself or herself.
- (6) Any supporting aids or equipment of a passenger referred to in this sub-regulation shall not obstruct emergency equipment.
- (7) A passenger with a splinted or artificial limb who cannot assist himself or herself shall be accompanied by an able-bodied assistant.

Limitations on carriage of infants, children and passengers with disability

- **136.06.10** (1) Only one passenger with a disability or one unaccompanied minor may be carried in a flight in a commercial air transport balloon under the operator's discretion.
- (2) An able-bodied assistant shall accompany a passenger with a disability who cannot assist himself or herself, and such assistant shall be assigned with the responsibility of the safety of such passenger.
- (3) The operator may establish procedures, other than the procedures referred to in subregulations (1) and (2), for the carriage of infants, children, and passengers with a disability: $\frac{1}{2}$ Provided that $\frac{1}{2}$
 - (a) such procedures do not jeopardise aviation safety; and
 - (b) prior written approval is obtained from the Director.

Passenger services

- **136.06.11** (1) Except when in use, all items for passenger services, including food containers, thermos flasks and servicing trays, shall be carried in their respective stowages and secured against movements likely to cause injury to persons or damage to the balloon.
- (2) All items referred to in sub-regulation (1) shall be stowed during take-off and landing or during emergency situations, as directed by the PIC of the balloon.

Incidents and defects

- **136.06.12** (1) The operator of a commercial air transport free balloon shall establish adequate inspection and reporting procedures to ensure that defective equipment is reported to the PIC of the balloon before take-off.
- (2) The procedures referred to in sub-regulation (1) shall be extended to include the reporting to the operator of all incidents or the exceeding of limitations that may occur while the flight crew are embarked on the balloon and of defective equipment found on board.
- (3) Upon receipt of the reports referred to in sub-regulation (2), the operator shall compile a report and submit such report on a monthly basis to the Director.

SUBPART 7: BALLOON PERFORMANCE OPERATING LIMITATIONS

General

136.07.1 The operator of a free balloon shall not operate the balloon free flight by night or in IMC unless tethered and except under special VFR or under special conditions as approved by the Director.

General provisions for all classes of free balloons

136.07.2 The operator of a commercial air transport balloon shall ensure that the mass of the free balloon, at the start of the take-off, is not greater than the mass at which the requirements prescribed in the appropriate flight manual can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds.

Take-off

136.07.3 The operator of a free balloon shall ensure that the mass of the balloon does not exceed the MCM for the pressure altitude and the ambient temperature at the point of departure.

SUBPATR 8: MAINTENANCE

General

136.08.1 The operator of a commercial air transport free balloon shall not operate the balloon

unless such balloon is maintained in accordance with the regulations in Part 43.

Balloon maintenance schedule

136.08.2 (1) The operator of a commercial air transport free balloon shall ensure that the balloon is maintained in accordance with a balloon maintenance schedule established by the

manufacturer.

(2) The schedule shall contain details, including frequency, of all maintenance required to be

carried out on the balloon.

(3) The schedule shall include a reliability programme if the Director determines that such a

reliability programme is necessary.

(4) The schedule referred to in sub-regulation (1) and any subsequent amendment thereof

shall be approved by the Director.

Maintenance contracted to approved maintenance organisation

136.08.3 If maintenance on a commercial air transport free balloon is carried out by the holder of an AMO approval with the appropriate rating issued in terms of Part 145, the operator of the

of an AMO approval with the appropriate rating issued in terms of Part 145, the operator of the balloon shall ensure that all contracted maintenance is carried out in accordance with the

regulations in Part 43.

PART 137: AGRICULTURAL OPERATIONS

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SUBPART 2: FLIGHT RULES

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SUBPART 1: GENERAL PROVISIONS

Applicability

137.01.1 (1) This Part applies to –

- (a) aircraft engaged in commercial or non-commercial agricultural operations within the Republic;
- (b) aircraft registered in the Republic and engaged in commercial or noncommercial international agricultural operations; and
- (c) persons acting as flight crew members of the aircraft operated in terms of this Part.

(2) Unless the context otherwise indicates, agricultural operations shall be conducted in accordance with and in addition to the provisions of Part 91 and Part 121, Part 127 or Part 135, as the case may be.

Requirements for ratings

- 137.01.2 The pilot of an aircraft engaged in an agricultural operation, shall hold
 - (a) a valid agricultural pilot rating issued in terms of subpart 48 of Part 61 for the category of aircraft used; and
 - (b) a pest control operator's certificate issued in terms of the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

Requirements for commercial agricultural operations

- **137.01.3** The operator of an aircraft engaged in commercial agricultural operations, shall not operate the aircraft unless such operator is the holder of a valid
 - (a) licence issued in terms of the Air Services Licensing Act, 1990, (Act No. 115 of 1990), or the International Air Services Act, 1993 (Act No. 60 of 1993); and
 - (b) operating certificate issued in terms of Part 121, Part 127 or Part 135, as the case may be.

Aircraft equipment

137.01.4 Each owner or operator of an aircraft engaged in an agricultural operation shall ensure that the aircraft has, in addition to the equipment prescribed in Part 91, an approved and properly installed shoulder harness for each person on board.

SUBPART 2: FLIGHT RULES

Dispensing agricultural chemicals

- **137.02.1** (1) The pilot of an aircraft dispensing an agricultural chemical in an agricultural operation, shall dispense the agricultural chemical
 - (a) for its registered use; and
 - (b) in accordance with the safety instructions of use limitations on its label.
- (2) Notwithstanding the provisions of sub-regulation (1), the pilot may, if the operation is for experimental purposes
 - (a) under the supervision of a Government department conducting research in the field; or
 - (b) in terms of a permit from the applicable authority controlling such chemicals,

dispense the agricultural chemical as necessary for the particular experiment.

Direction of turns at aerodrome

137.02.2 The pilot of an aircraft performing an agricultural operation may turn in a direction other than that prescribed in Part 91, when approaching for a landing at, or after take-off from, an aerodrome if –

- (a) the aerodrome is used solely for agricultural operations; or
- (b) in any other case, the aerodrome displays the visual ground signal prescribed in Part 91 indicating that an agricultural operation is being conducted from that aerodrome.

Height of turns at aerodromes

137.02.3 The pilot of an aircraft performing an agricultural operation may commence a turn after take-off from an aerodrome at an altitude other than that prescribed in Part 91 if –

- (a) the turn does not cause the aircraft to fly over a populous area; and
- (b) the aerodrome
 - (i) is used solely for agricultural operations; or
 - (ii) has an aerodrome control service in operation and the turn is performed in accordance with air traffic control clearance; or
 - (iii) in any other case, displays the visual ground signal prescribed in Part 91 indicating that an agricultural operation is being conducted from that aerodrome.

Operation without position lights

137.02.4 Notwithstanding the provisions of Part 91, the pilot of an aircraft performing an agricultural operation may operate at night without aircraft position lights if-

- (a) it is in the interest of aviation safety to turn the lights off due to operating conditions;
- (b) prominent unlighted objects are visible for not less than 1 850 metres;
- (c) take-offs and landings at aerodromes with an aerodrome control service are performed in accordance with an air traffic control clearance; and
- (d) take-offs and landings at other aerodromes are not made while other aircraft operations requiring position lights are in progress at that aerodrome.

Operation over populous areas

137.02.5 The pilot of an aircraft in an agricultural operation over a populous area may, for the proper completion of the operation, fly below the minimum height prescribed in Part 91 if –

(a) the operation is conducted on behalf of a Government department;

- (b) prior approval is obtained from the Director and the operation is conducted in accordance with conditions and limitation determined by the Director;
- (c) the operation is conducted under the authority of an operating certificate issued as contemplated in regulation 137.01.3(b); and
- (d) the holder of the operating certificate has complied with regulation 137.04.3.

Operation over non-populous area

- **137.02.6** Notwithstanding the provisions of Part 91, the pilot of an aircraft engaged in an agricultural operation may, during or for the purposes of the operation, fly at any altitude and at any distance from an obstruction if
 - (a) the operation is not conducted over a populous area;
 - (b) the operation is conducted without creating a hazard to persons or property on the ground; and
 - (c) the altitude and distance for all approaches, turns and departures are necessary for the operation.

Fuel reserves

- **137.02.7** Notwithstanding the provisions of Part 91, the pilot of an aircraft engaged in an agricultural operation shall ensure that the aircraft has the following minimum fuel reserves:
 - (a) for aeroplanes, 30 minutes flight time;
 - (b) for helicopters, 3 times the anticipated flight time or 30 minutes flight time, whichever is the lesser.

SUBPART 3: SPECIAL FLIGHT RULES

General

137.03.1 This subpart prescribed exceptions to the general operating and flight rules in Part 91, for the pilot of an aeroplane issued with a restricted category certificate of airworthiness in terms of Part 21, engaged in an agricultural operation.

Maximum certificated mass

137.03.2 (1) Notwithstanding the provisions of Part 91 and subject to sub-regulation (2), the pilot of an aeroplane engaged in an agricultural operation, may take-off at a mass greater than the MCM specified in the aeroplane flight manual if the pilot complies with the requirements as prescribed in Document SA-CATS 137.

(2) Where there is a third party risk as specified in Document SA-CATS 137, the pilot shall determine the maximum take-off mass from the requirements prescribed in regulations 137.03.3 and 137.03.4.

Take-off distance and flight path

- **137.03.3** (1) Where there is a third party as specified in Document SA-CATS 137, the pilot of an aeroplane engaged in an agricultural operation shall, notwithstanding the provisions of Part 91 and subject to sub-regulation (2), ensure that the take-off distance available is greater than the take-off distance specified in the aeroplane flight manual, multiplied by a factor of 1.2.
- (2) When calculating the take-off distance, the pilot shall take the following factors into account:
 - (a) The mass of the aeroplane at the commencement of the take-off run;
 - (b) the pressure altitude of the aerodrome;
 - (c) the ambient temperature at the aerodrome;
 - (d) the runway surface type and condition;
 - (e) the runway slope in the direction of take-off; and
 - (f) not more than 50% of the headwind component or not less than 150% of the tailwind component.
- (3) Where there is no third part at risk as specified in Document SA-CATS 137, the pilot is not required, notwithstanding the provisions of Part 91, to comply with
 - (a) the take-off distance specified in the aeroplane flight manual; and
 - (b) where applicable, the take-off flight path gradient specified in the aeroplane flight manual.

Take-off flight path

- **137.03.4** (1) Where there is a third party risk as defined in Document SA-CATS 137, the pilot of an aeroplane engaged in an agricultural operation shall ensure that, notwithstanding the provisions of Part 91, the take-off flight path clears all obstacles by
 - (a) a vertical distance of at least 50 feet plus 0.025D; or
 - (b) a lateral distance of at least 30 metres plus 0.1D, where D is the horizontal distance travelled by the aeroplane from the end of the take-off distance available.
- (2) When calculating compliance with sub-regulation (1), the pilot shall take the following factors into account:
 - (a) The take-off flight path shall begin at a height of 50 feet above the take-off surface at the end of the take-off distance required by regulation 137.03.3(1) and (2) and end at a height of 500 feet above the take-off surface;

- (b) the aeroplane shall not be banked at an angle exceeding 20 degrees; and
- (c) obstacles which have a lateral distance greater than 150 metres from the planned flight path may be disregarded.

SUBPART 4: COMMERCIAL OPERATIONS

Records

- **137.04.1** (1) A holder of an operating certificate shall maintain the following records at the principal place of operation:
 - (a) The name and address of each client;
 - (b) the date of each agricultural operation;
 - (c) the name and quantity of the material dispensed during each agricultural operation;
 - (d) the name, address, licence number, and rating details of the pilot concerned;
 - (e) the date on which an agricultural pilot rating was issued to the pilot concerned.
- (2) The records shall be retained for a period of not less than 12 months from the date on which the operation is completed.

Remote base operations

- **137.04.2** The holder of an operating certificate who operates an aircraft engaged in an agricultural operation, from a base other than the principal place of operation, for a period of 14 or more consecutive nights, shall appoint a base pilot who
 - (a) holds a valid agricultural pilot rating;
 - (b) is responsible for the operations from that remote base; and
 - (c) may be responsible for arranging work rosters and maintaining records.

Operations over populous areas

- **137.04.3** The holder of an operating certificate who wishes to operate an aircraft engaged in an agricultural operation over a populous area shall
 - (a) prepare a plan of the operation, in conjunction with, and for the briefing of, all personnel and organisations involved in the operation, containing
 - (i) consideration of obstructions to flight;
 - (ii) the emergency landing capabilities of the aircraft used; and
 - (iii) and co-ordination necessary with the ATSU concerned;
 - (b) give prior written notification to the local government in whose jurisdiction the operation is to be performed;
 - (c) give notice of the operation to the public by an effective means;

- (d) ensure maximum safety to persons and property on the ground, consistent with the operation; and
- (e) ensure that the aircraft has, within the preceding 100 hours of time in service
 - (i) had a mandatory periodic inspection; or
 - (ii) been inspected under a progressive inspection programme, in accordance with the regulations in Part 43.

PART 138: AIR AMBULANCE OPERATIONS

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138.08.1 Aircraft maintenance

SUBPART 1: GENERAL

Applicability

138.01.1 (1) This Part applies to –

- (a) aircraft registered in the Republic and engaged in commercial air ambulance operations;
- (b) foreign-registered aircraft operated by an air service operator licensed in terms of the Air Services Licensing Act, 1990 or the International Air Services Act, 1993 and engaged in commercial air ambulance operations;
- (c) foreign-registered aircraft utilised in commercial air ambulance operations to transport one or more patients within or out of the Republic; and
- (d) persons acting as flight crew members, operations personnel and medical personnel in respect of any air ambulance operation carried out in terms of this Part.
- (2) The provisions of Part 91, Part 121, Part 127 and Part 135 shall apply with the necessary changes to any aircraft operated in terms of this Part.

Requirements for commercial air ambulance operations

138.01.2 (1) The operator of an aircraft engaged in a commercial air ambulance operation, shall not operate the aircraft unless such operator is the holder of a valid –

- (a) Class III, type G7 licence issued in terms of the Air Services Licensing Act, 1990, or the International Air Services Act, 1993,; and
- (b) operating certificate issued in terms of Part 121, Part 127 or Part 135, as the case may be, and endorsed for operations in terms of Part 138; or
- (c) in the case of a foreign-registered aircraft, a foreign operator's permit issued in terms of the International Air Services Act, 1993).

- (2) Only aircraft that has been certified on its certificate of airworthiness for use as air ambulance may be used in commercial air ambulance operations.
- (3) An operator, engaged in commercial air ambulance operations who wishes to utilise an aircraft that has not been certified for air ambulance operations as a substitute for one of its certified aircraft, shall utilize such aircraft for a maximum of seven (7) consecutive days only or during a period of maximum fourteen (14) days, provided that such aircraft is essentially configured according to the provisions of this Part.
- (4) In the event that it is not be possible to adhere of the conditions, prescribed in subregulation (3) above, the operator shall obtain approval from the Director for the utilisation of the aircraft which is not certified for air ambulance operation.

SUBPART 2: FLIGHT CREW

Pilot qualifications

- **138.02.1** (1) The pilot of an aircraft engaged in air ambulance operations shall
 - (a) as a minimum be the holder of a valid CPL with night rating appropriate to the category and type of air ambulance aircraft and the mission to be flown;
 - (b) have received training and terrain and demonstrated minimum competency for the relevant mission to be flown, as prescribed in the manual of procedure; and
 - (c) have successfully completed the training referred to in Subpart 3.
- (2) The manual of procedure of the operator shall set minimum criteria for qualifications of pilots to be used for the missions intended.

Medical qualifications

138.02.2 Medical personnel and medical service providers involved in air ambulance operations shall comply with the relevant legislation and regulations administered by the Department of Health, the Health Professions Council of South Africa and the South African Nursing Council, as the case may be.

SUBPART 3: TRAINING

Training of flight crew, medical personnel and operations personnel

138.03.1 (1) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that each flight crew member, medical personnel member or operations personnel

member, assigned to an air ambulance operation, has successfully completed the initial or recurrent training, as the case may be, as prescribed in Document SA-CATS 138.

- (2) Notwithstanding the provisions of sub-regulation (1), a medical specialist who is not trained in accordance with these regulations may be taken on a specific air ambulance operation, in addition to the regular medical personnel, for the benefit of the patient.
- (3) The operator shall ensure that all flight crew members, medical personnel or operations personnel, as the case may be, who have not completed the training as referred to in sub-regulation (1), shall have a standard safety briefing pertaining to the aircraft to be used for the operation.
- (4) The owner or operator of an air ambulance operation shall ensure that no flight crew member, medical personnel or operations personnel whose training has expired, is assigned flight duties on an aircraft engaged in an air ambulance operation until such time that such member undergoes recurrent training.
- (5) Notwithstanding sub-regulation (4) above, a flight crew member, medical personnel or operations personnel, as the case may be, may be assigned flight duties without having undergone recurrent training as stipulated in sub-regulation (4) above: Provided that such flight crew member, medical personnel or operations personnel, as the case may be
 - (a) undergoes such recurrent training within a period not exceeding six (6) months from the date of expiry of the preceding training;
 - (b) is, during the period of assignment, assigned to duties with at least one flight crew member, medical personnel or operations personnel, as the case may be, whose training has not expired; and
 - (c) has, during the period of assignment, not been off active duty for a period exceeding three (3) months.
- (6) Any training required by this Part shall be conducted in accordance with the relevant requirements of this Part or by an ATO approved in terms of Part 141.

SUBPART 4: MANAGEMENT

Quality assurance system

138.04.1 (1) The owner or operator of an aircraft engaged in an air ambulance operation shall have a quality assurance system for the control and supervision of the air ambulance operation in place.

(2) In respect of the owner or operator of a commercial air ambulance operation, the quality assurance system of the operator referred to in Part 121, Part 127 or Part 135, as the case may be, shall include the quality assurance system as prescribed by this Part.

Manual of procedure

- **138.04.2** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall compile a manual of procedure in accordance with the provisions of this Subpart, for the use and guidance of flight crew, medical personnel and operations personnel, setting out the manner in which such owner or operator will operate the air ambulance operation.
- (2) In respect of an owner or operator of a commercial air ambulance operation, the operations manual of the operator referred to in Part 121, Part 127 or Part 135, as the case may be, shall include the procedures as prescribed by this Part.
- (3) The owner or operator of an aircraft shall, prior to commencing an air ambulance operation therewith, submit in duplicate the manual of procedure to the Director for approval.
- (4) If the Director is satisfied that the aircraft owner or operator will comply with the provisions of this Part, the Director shall certify in writing on both copies of the manual of procedure that such manual has been approved, and shall return one copy of the approved manual to the owner or operator.
- (5) The owner or operator of an aircraft engaged in an air ambulance operation shall submit in duplicate any amendment to the manual of procedure to the Director for approval.
- (6) If the Director is satisfied that the aircraft owner or operator will comply with the provisions of this Part, the Director shall certify in writing on both copies of the amendment to the manual of procedure that such amendment has been approved, and shall return one copy of the approved amendment to the owner or operator.
- (7) The owner or operator of an aircraft in an air ambulance operation shall at all times operate the aircraft in accordance with the approved manual of procedure and any approved amendment thereto.
- (8) The owner or operator of an aircraft engaged in an air ambulance operation shall:
 - ensure that those parts of the manual, which are required for the conduct of a flight, are easily accessible to the flight crew and medical personnel on board the aircraft;
 - (b) make the manual of procedure available for the use and guidance of operations personnel;
 - (c) keep the manual of procedure up to date; and
 - (d) keep the manual of procedure in a safe place.

- (9) The structure and contents of the manual of procedure shall be as prescribed in Document SA-CATS 138.
- (10) The manual of procedure shall be reviewed annually and updated in accordance with the quality assurance system established by the owner or operator in terms of regulation 138.04.1.

Training records

- **138.04.3** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall retain records of all training undertaken in terms of this Part by the flight crew, medical and operations personnel in his, her or its employ.
- (2) The records referred to in sub-regulation (1) above, shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such training is given.
- (3) The owner or operator of an aircraft engaged in an air ambulance operation shall retain the records of each flight crew member, medical personnel and operations personnel for a period of at least 12 months from the date on which the flight crew member, medical personnel or operations personnel has left the employ of such owner or operator.

Presumption

138.04.4 For the purposes of this subpart, a medical personnel member shall be deemed to be in the employ of the owner or operator of the air ambulance aircraft if the medical personnel member is assigned to flight duties by such owner or operator, irrespective of whether such medical personnel member is remunerated by such owner or operator or not.

SUBPART 5: INSTRUMENTS AND EQUIPMENT

Aircraft configuration

- **138.05.1** (1) The owner or operator of an aircraft engaged in air ambulance operations shall ensure that the cabin of the aircraft
 - (a) has an entry which allows loading of the patient without excessive manoeuvring and which is not greater than 45 degrees tilt along the lateral axis and not greater than 30 degrees tilt along the longitudinal axis;
 - (b) has an entry that allows loading or unloading without compromising the functioning of the monitoring systems, IV lines and manual or mechanical ventilation: and
 - (c) must be able to accommodate volumetrically, as a minimum:
 - (i) one stretcher unit large enough to carry a 95 percentile patient full length in supine position (6ft / 1.8m stretcher);

- (ii) two medical personnel, with sufficient access to the patient from a secured seat-belted position; and
- (iii) all the medical equipment required by the medical service provider for the operation.
- (2) If the owner or operator has to modify the aircraft in order to comply with the provisions of this Subpart, such owner or operator shall obtain prior written approval from the Director for such modification.

Lighting and electrical equipment

138.05.2 The owner or operator of an aircraft engaged in an air ambulance service shall ensure that –

- (a) adequate lighting equipment is provided in the patient care area;
- (b) portable lighting equipment is provided for use in the event of a failure of, or inability to use, the main electrical system;
- (c) the cockpit or the flight deck, as the case may be, is screened from lights in the patient care area during night operations; or alternatively, where such protection is not possible, shall ensure that sufficient light of low intensity is used in the patient care area provided that such lighting does not interfere with the operations of the flight crew;
- (d) without compromising the normal operation of any aircraft equipment, and if required by the medical service provider, there shall be a power source available from the aircraft.

Communication systems

138.05.3 The owner or operator of an aircraft engaged in an air ambulance operation shall not operate the aircraft –

- (a) unless such aircraft is equipped with means to establish two-way communication with the dispatching base; and
- (b) in cases where unaided verbal communication cannot be sustained, unless such aircraft is equipped with an interphone system which provides a means of two-way communication between the flight crew members and medical personnel members and the pilot can isolate himself or herself from such system.

Patient restraints, stretchers and incubators

138.05.4 (1) The owner or operator of an aircraft engaged in an air ambulance operation shall not operate the aircraft unless such aircraft is equipped with –

- (a) an approved restraining strap for each patient; and
- (b) an additional restraining device for a child or small adult who will not be adequately restrained with the restraining strap referred to in paragraph (a), if applicable;

- (c) an incubator, which is properly secured in position, should an incubator be needed for the flight; and
- (d) a stretcher and mounting system which allows for rapid detachment from the base unit.
- (2) The stretcher or incubator shall be positioned such as
 - (a) to allow medical personnel a clear view of, and access to the patient to perform monitoring and therapeutic intervention as needed;
 - (b) not to block access to normal and emergency exits;
 - (c) not to interfere with any operation of any aircraft controls; and
 - (d) not to restrict access to any emergency equipment.
- (3) The attachment of the stretcher or incubator to the aircraft structure shall allow its rapid detachment for evacuation. The stretcher shall be certified for use in an aircraft by the manufacturer or any other recognised certification body which is acceptable to the Director: Provided that all recommendations by such manufacturer or certification body shall be implemented and adhered to for the stretcher to be acceptable to the Director.
- (4) All restraint systems to be used in the aircraft shall be approved by the Director In cases where the certification referred to in sub-regulation (3) cannot be obtained, the operator shall obtain approval from the Director for the use of such stretcher.
- (5) All other restraint systems to be used in the aircraft shall be approved by the Director.
- (6) The operator shall ensure that suitable measures are taken to protect the pilot, aircraft controls, communication and navigation equipment from any interference by the patient, medical personnel or medical equipment on board the aircraft during flight or during loading and unloading.

Medical equipment

138.05.5 The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that –

- (a) any medical equipment, supplies or other items on board of the aircraft are
 - (i) properly secured in accordance with good aviation practices;
 - (ii) so positioned that they do not or are not likely to
 - (aa) cause injury to any person on board of the aircraft;
 - (bb) obstruct access to any regular or emergency exit; or
 - (cc) obstruct access to any emergency equipment.
 - (iii) appropriately certified by the manufacturer thereof for use in an aircraft; and

- (b) prior to flight, any medical equipment, which transmits any signals, has been certified by the manufacturer for use in an aircraft or has been certified by an aviation authority acceptable to the Director for use in an aircraft
 - (i) certified by the manufacturer for use in an aircraft or has been certified by an aviation authority acceptable to the Director for use in an aircraft; and
 - (ii) tested to ensure that it does not interfere with any aircraft system, in particular with the avionic equipment of the aircraft, and that such avionic equipment does not interfere with the proper functioning of the medical equipment.

Oxygen and other gas cylinders

138.05.6 (1) If an aircraft engaged in an air ambulance operation is equipped with gas cylinders for medical purposes, the cylinders shall –

- (a) be carried in accordance with the provisions of Part 92; and
- (b) if the cylinders are inside the cabin, be positioned in such a way that no part of the fitment constitutes a hazard to any person inside the cabin, the pressure gauges are fitted and visible for use, and shut-off and change-over valves are readily accessible; or
- (c) if the cylinders are positioned outside the cabin, be positioned in such a way that the in-line pressure gauges are visible for use and shut-off and change-over valves are installed inside the cabin.
- (2) All portable gas cylinders shall be properly secured with approved devices during flight.
- (3) All gas outlets shall be clearly marked for identification as to their function and gas supplied in accordance with the applicable SABS (South African Bureau of Standards) Code of Practice.
- (4) All oxygen and medical gas cylinders used in an air ambulance operation
 - (a) shall have an annual visual and a five-yearly hydrostatic inspection by a testing facility approved for the purpose by the Department of Labour;
 - (b) shall be marked with a sticker denoting approval for "return to service" and "next service due" date, which sticker shall be clearly visible to flight crew and medical personnel;
 - (c) shall, where applicable, bear a stamp of approval from an appropriately approved provider which stamp shall be clearly visible on each cylinder and certifying such cylinder as being approved.
- (5) All oxygen and medical gas cylinders fixed in an air ambulance aircraft shall be maintained as per the manufacturer's specifications.

Intravenous fluids

138.05.7 An adequate supply of conveniently placed hangers or hooks shall be available and all such supports shall be –

- (a) soft, padded or flush-mounted to prevent head trauma to any person on board the aircraft; and
- (b) of a design which prevents the accidental release of intravenous containers in the event of turbulence, a hard landing or an emergency situation.

SUBPART 6: FLIGHT OPERATIONS

Control of Operations

- **138.06.1** (1) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that he or she is aligned with a medical service provider who is compliant with all the relevant legislation administered by the Department of Health to consult with on matters pertaining to
 - (a) the advisability of the transportation by air of the patient;
 - (b) the type of air ambulance aircraft required for the transport;
 - (c) the level of patient-care required;
 - (d) medical equipment needed on board the aircraft; and
 - (e) precautions to be taken during the flight and during ground transportation.
- (2) Where the operator of an aircraft is also the medical service provider, such operator shall ensure that the medical aspects of the operation complies with all the relevant requirements as contained in the relevant legislation administered by the Department of Health.
- (3) The medical personnel on board the aircraft shall be responsible for patient care from the time of hand-over by the dispatching medical unit until the time of hand-over to the receiving medical unit.
- (4) The PIC of the aircraft shall at all times be responsible for the safety of the aircraft operation.

Dispatching base

138.06.2 (1) The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that a person with a reasonable knowledge of aviation, air traffic service, safety and emergency procedures, navigation techniques and the influence of weather is assigned to the dispatching base.

- (2) The owner or operator shall establish an appropriately equipped operations centre from which air ambulance operations are controlled.
- (3) The minimum requirements to be met in respect of paragraph (2) are laid down in Document SA-CATS 138.

Landings

- **138.06.3** (1) The PIC of an aircraft engaged in an air ambulance operation is exempted from the prohibition to land on a public road in terms of regulation 91.06.1(b).
- (2) The PIC of a helicopter engaged in an air ambulance operation is exempted from the restrictions imposed by regulation 91.07.4(2) in terms of sub-regulation (b) of said regulation.
- (3) Notwithstanding the provisions of sub-regulations (1) and (2), the PIC shall make use of these privileges only if no viable alternative landing place exists and while taking extreme care for the safety of the aircraft and property and persons on the ground.
- (4) The manual of procedure of the operator shall clearly state conditions under which landings at non-registered landing areas may be carried out.

Loading and unloading

- **138.06.4** (1) The PIC of a helicopter engaged in an air ambulance operation shall allow the loading or unloading of a patient with the rotors turning only
 - (a) under strictly controlled circumstances overseen by appropriately trained personnel;
 - (b) in times of a serious emergency; and
 - (c) if the loading or unloading of a patient is undertaken by appropriately trained personnel.
- (2) In cases of fixed-wing multi-engine aircraft, the loading or unloading shall be undertaken only if the engine on the side of the exit is switched off.
- (3) Loading or unloading shall not be undertaken in cases of single-engine aircraft.
- (4) The owner or operator shall make provisions in the manual of procedure referred to in regulation 138.04.2 concerning circumstances and procedures for rapid patient loading and unloading.
- (5) Medical personnel shall inform the PIC regarding add-on equipment for calculation of the aircraft's mass and balance.

Night flying

138.06.5 The PIC of a helicopter used in an air ambulance operation shall not undertake any air ambulance flight operation by night unless such helicopter is certified for instrument flight and is operated in accordance with its flight manual for instrument flight: Provided that in any other case an air ambulance flight which is operated under VMC –

- (a) may continue to an illuminated hospital stop or an aerodrome approved for night operations for not more than 45 minutes after sun set; and
- (b) may commence such flight within the 45 minutes before sun rise.

SUBPART 7: OTHER OPERATIONS

Infection control and fluid contamination

138.07.1 The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that –

- (a) every employee, before performing duty on, or cleaning an aircraft,
 - (i) is familiar with any infection control procedure which may apply in respect of the aircraft; and
 - (ii) has taken appropriate precautions before performing duty on or cleaning such aircraft, as prescribed by the Occupational Safety and Health Act of 1993 (Act No 85 of 1993) and other relevant legislation, and set out in the manual of procedure referred to in regulation 138.04.2;
- (b) such aircraft shall not be operated unless it is equipped with measures to protect the aircraft against bodily fluid contamination;
- (c) the protection measures referred to in paragraph (b) above are set out in the manual of procedures and are compliant with the minimum standards as prescribed in the regulations issued by the Department of Health; and
- (d) the cleaning agents used for cleaning are non-corrosive or non-abrasive to the aircraft.

SUBPART 8: MAINTENANCE

Aircraft maintenance

138.08.1 The owner or operator of an aircraft engaged in an air ambulance operation shall ensure that any person involved in the maintenance of the aircraft has a thorough knowledge of the interior modifications to, and the medical fitments of such aircraft.

PART 139: AERODROMES AND HELIPORTS

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SUBPART 4: NON-LICENSED HELICOPTER SITES

139.04.1 Approval and operation of non-licensed helicopter sites

SUBPART 1: GENERAL

Applicability

139.01.1 (1) This part applies to –

- (a) the licensing of areas demarcated for the development of aerodromes;
- (b) the licensing and operation of aerodromes; and
- (c) the licensing and operation of heliports.
- (2) No place in the Republic shall be used as a place of landing or departure by an aeroplane with a MCM exceeding 5 700 kilograms, used in commercial air transport operations, unless it has been licensed in terms of the regulations in this part.
- (3) No area on any land, water or building shall be used for the landing or take-off of aircraft if the air traffic in such area will in any way interfere with existing established procedures regarding controlled airspace.

Use of military aerodromes and heliports

- **139.01.2** (1) Subject to the approval of the Minister of Defence, the Director may, upon application in writing by any operator of an aircraft who desires to use a military aerodrome or heliport for civil aviation purposes, authorise the use of the military aerodrome or heliport for such purposes.
- (2) An authorisation referred to in sub-regulation (1) may be granted under such conditions and for such period which the Director may determine, if the Director is satisfied that the use of such military aerodrome or heliport by such operator will not jeopardise aviation safety.

Restrictions

- **139.01.3** The Director may impose restrictions as to the use of an aerodrome or a heliport and may limit or totally prohibit the operation of any aircraft
 - (a) not equipped with radio equipment;
 - (b) the radio equipment of which is not complementary to the radio equipment installed for the control of air traffic at such aerodrome or heliport, if the Director is satisfied that such restriction, limitation or prohibition is necessary in the interests of aviation safety.

Publication of restrictions and deviations

139.01.4 The Director shall, upon the –

- (a) imposition of any restriction, limitation or prohibition referred to in regulation 139.01.3;
- (b) issuing of an aerodrome licence in terms of regulation 139.02.16;
- (c) renewal of an aerodrome licence in terms of regulation 139.02.17:
- (d) issuing of a heliport licence in terms of regulation 139.03.13; or
- (e) renewal of a heliport licence in terms of regulation 139.03.17,

publish in an AIP, according to the provisions of Part 175 –

- (i) particulars of the restriction, limitation or prohibition referred to in paragraph (a);
- (ii) the category for which the aerodrome is licensed;
- (iii) the restrictions, if any, relating to non-compliance with, or deviations from -
 - (aa) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172;
- (iv) the restrictions, if any, relating to non-compliance with, or deviations from
 - (aa) the appropriate heliport design, operation and equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172;
- (v) limitations on size of aircraft commensurate with the level of AR & FFS provided.

Flights by night

139.01.5 The Director may prohibit flights by night from or at any aerodrome or any heliport at which adequate facilities for night flights are lacking or where the terrain or other objects in the vicinity of the aerodrome or the heliport are such as to endanger operators of aircraft used in night flights.

Register of licences

- **139.01.6** (1) The Director shall maintain a register of all licences of intent, aerodrome licences and heliport licences issued in terms of the regulations in this part.
- (2) The register shall contain the following particulars:
 - (a) The full name and, if any, the trade name of the holder of the licence;
 - (b) the postal address of the holder of the licence;
 - (c) the name and the location of the aerodrome for which the licence was issued;
 - (d) the name and the location of the heliport for which the licence was issued;
 - (e) the proposed name and location of the area demarcated for the development of an aerodrome, for which the licence of intent was issued;
 - (f) the number of the licence issued to the holder;
 - (g) the date on which the licence was issued;
 - (h) file reference numbers of initial and subsequent safety inspection records and audit reports in respect of all aerodromes and heliports licensed; and
 - (i) the nationality of the holder of the licence.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Safety and security inspections and audits

139.01.7 (1) An applicant for the issuing of an aerodrome or heliport licence shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits which may be necessary to verify the validity of the application concerned.

- (2) The holder of an aerodrome licence shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits of such holder's aerodrome, documents and records which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.
- (3) The holder of a heliport licence shall permit an authorised officer, inspector or authorised person to carry out such safety and/or security inspections and audits of such holder's heliport, documents and records which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Storage of flammable goods

- **139.01.8** (1) Fuel, pyrotechnic stores and all highly flammable matter shall be stored on a licensed aerodrome or heliport only in buildings or receptacles which comply with the appropriate standards prescribed in the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993), or any other law.
- (2) Fuel storage facility in and around aircraft hangers or any building must
 - (a) have at least a 5 meter clean area on all sides;
 - (b) be protected with a bund wall that can contain 110% of the stored content; and
 - (c) comply with SANS 108 and the applicable municipal by-laws.

Safety measures against fire

139.01.9 No person shall on a licensed aerodrome or heliport –

- (a) smoke in, or bring an open flame into
 - (i) any place where such an act is prohibited by a notice displayed; or
 - (ii) any place within 15 metres of an aircraft or of any vehicle used for the supply of fuel to an aircraft or a store or dump or liquid fuel or explosives;
- (b) wilfully give a false fire alarm;
- (c) tamper or interfere with any fire hose reel, hydrant or any other item of equipment provided for fire-fighting purposes;
- (d) keep, store, discard or discharge any flammable liquid, gas, signal flares or other like material in an aircraft except in the receptacle appropriate for the purpose or in a place on the aerodrome or heliport specifically approved by the aerodrome or heliport operator for the purpose; or
- (e) store or stack any material or equipment in a manner which constitutes, or is likely to constitute, a fire hazard.

Lights which endanger the safety of aircraft

139.01.10 (1) Whenever in the Republic any light or pattern of lights is exhibited –

- (a) in the vicinity of an aeronautical light or system of aeronautical lights which by reason of the possibility of it being mistaken for such aeronautical light or lights, is likely to endanger the safety of aircraft; or
- (b) which, being in the vicinity of a licensed aerodrome or heliport, is liable by its glare to endanger the safety of aircraft arriving at or departing from such aerodrome or heliport,

the Director may cause a notice to be served upon the owner of the place where the light is exhibited or upon the person having charge of the light or upon the person owning or having charge of the pattern of lights or any portion of such pattern, directing such owner or person within the period specified in such notice to extinguish or screen effectively the light or lights under his, her or its control and to prevent in the future the exhibition of any light or particular type of light either at all or when ineffectively screened.

- (2) No rockets, missiles or flares other than those used for aeronautical distress shall be fired within controlled or advisory airspace.
- (3) Except with the permission of the Director and subject to such conditions as he or she may impose, the firing of rockets, missiles and flares shall not take place in any other airspace than that referred to in sub-regulation (2)
 - (a) if it exceeds a height of more than 2000 ft above the surface; and
 - (b) if it is closer than 8 kilometres from the reference point of an aerodrome licensed in terms of Part 139.

Use of runways or taxiways and landing at or taking off from aerodrome

139.01.11 Save in an emergency –

- (a) or on the direction of the aerodrome operator given in terms of regulation 139.01.14, no person shall move an aircraft in the restricted area except on a runway or taxiway;
- (b) no person shall move an aircraft or vehicle onto a runway or a taxiway or go onto a runway or a taxiway
 - (i) without the permission of the ATSU operating at the licensed aerodrome, if the ATSU is manned at the time:
 - (ii) except according to the instructions issued by the ATSU operating at such aerodrome, if the ATSU is not manned at the time:
 - (iii) except in a manner that shall not endanger aircraft traffic, if the ATSU is not manned at the time and no instructions have been issued by such ATSU;
- (c) or with the approval of such holder, no person shall use a portion of a licensed aerodrome other than a runway for landing an aircraft or for taking off; and
- (d) no person shall land on a runway an aircraft fitted with a tailskid nor take off from a runway using such aircraft.

Points of entry to or exit from restricted area

- **139.01.12** (1) No person, vehicle, or aircraft travelling on the surface of a licensed aerodrome or heliport, may enter or leave the restricted area except at points established by the aerodrome or heliport operator for such purpose.
- (2) Save in an emergency, no person
 - (a) other than a person carried in an aircraft or in or on a vehicle shall enter or leave the restricted area; or
 - (b) shall move an aircraft travelling on the surface of a licensed aerodrome or heliport, or a vehicle into or from the restricted area,

except at an appropriate point of entry or exit stipulated in terms of sub-regulation (1).

Movement of aircraft or vehicles in restricted area on direction of aerodrome operator

139.01.13 (1) The operator of an aircraft which is travelling on the surface of a licensed aerodrome and which is in the restricted area but not on a runway or a taxiway or the person in lawful charge of a vehicle which is in the restricted area shall, on being directed to do so by the aerodrome operator, move that aircraft along the surface of the aerodrome or that vehicle –

- (a) to another place in the restricted area indicated by the aerodrome operator; or
- (b) from the restricted area,

and if such operator or person refuses or fails or is not present to comply forthwith with such direction, the aerodrome operator may have that aircraft or vehicle moved to comply with such direction and may recover from such operator or person the costs incurred in having that aircraft or vehicle so moved an any such action by the aerodrome operator shall not exempt such operator or person from a prosecution in respect of such refusal or failure.

- (2) Any direction given by the aerodrome operator in terms of sub-regulation (1) shall not authorise any person to move the aircraft or a vehicle onto a runway or a taxiway
 - (a) without the permission of the ATSU operating at the licensed aerodrome, if the ATSU is manned at the time;
 - (b) except according to the instructions issued by the ATSU operating at such aerodrome, if the ATSU is not manned at the time;
 - (c) except in a manner that shall not endanger aircraft traffic, if the ATSU is not manned at the time and no instructions have been issued by such ATSU.

Access to apron

- **139.01.14** (1) Except with the approval of the aerodrome operator no person other than
 - (a) a person carried in an aircraft travelling on the surface of a licensed aerodrome or in or on a vehicle;

- (b) a person about to embark in an aircraft parked on the apron, who is proceeding under the supervision of the operator of that aircraft or his or her employee from the terminal building to that aircraft;
- a person who has disembarked from an aircraft parked on the apron, who is proceeding under the supervision of the operator of that aircraft or his or her employee from that aircraft to the terminal building;
- (d) the operator of an aircraft parked on or moving on the surface of the apron or his or her employee only when the performance of his or her duties or the course of his or her employment requires his or her presence on the apron; or
- (e) the holder of a licence referred to in section 2(3) of the Businesses Act, 1991 (Act No. 71 of 1991), or his or her employee only when the performance of his or her duties or the course of his or her employment requires his or her presence on the apron, shall have access to the apron.
- (2) Except with the approval of the aerodrome operator no person shall move an aircraft travelling on the surface of a licensed aerodrome or a vehicle onto the apron.
- (3) The aerodrome operator shall determine procedures according to which permission to have access to the apron shall be granted.

Points of access to or egress from apron

- **139.01.15** (1) No person, vehicle or aircraft travelling on the surface of a licensed aerodrome may enter or leave the apron except at points established by the aerodrome operator for such purpose.
- (2) Save in an emergency no person
 - (a) other than a person carried in an aircraft or in or on a vehicle shall enter or leave the apron; or
 - (b) shall move an aircraft travelling on the surface of a licensed aerodrome or a vehicle onto or from the apron,

except at an appropriate point of access or egress stipulated in terms of sub-regulation (1).

Movement of aircraft or vehicles on apron

139.01.16 (1) No person shall move an aircraft or any vehicle on the apron of a licensed aerodrome –

- (a) if there is any reasonably foreseeable danger of a collision with a person or object on the aerodrome; and
- (b) unless a speed is maintained which is safe and reasonable under the circumstances, but which does not in any case exceed 30 km per hour:

Provided that any signals given by hand or otherwise by an official on duty at the aerodrome by instruction of the aerodrome operator to a pilot in control of an aircraft which is being moved on the aerodrome or to a driver or other person in control of any vehicle which is being moved on the apron, or any mark or light on the aerodrome having the purpose of serving as an aid to a

PIC of an aircraft or driver or person in control of a vehicle to indicate a specific route or parking bay on the aerodrome, by no means exempts such pilot, driver or other person from the obligation to stop such aircraft or vehicle or to take any other steps which might under the specific circumstances be imperative in order to avoid such collision or damage to property or loss of life.

(2) No person shall move an aircraft travelling under its own power on the surface of a licensed aerodrome on the apron unless he or she is the holder of an appropriate licence issued in terms of Part 61 which entitles him or her to pilot that aircraft: Provided that a student pilot who is not the holder of a SPL, may move an aircraft on the apron while undergoing training with and accompanied in the aircraft by the holder of a flight instructor rating.

Parking of aircraft on apron

139.01.17 (1) The aerodrome operator shall ensure that –

- (a) parking stands are provided and marked for suitable size and type of aircraft.
- (b) where the docking system is not in place or is unserviceable procedures to safely guide aircraft in to the parking bay are provided.
- (2) The operator of an aircraft shall ensure
 - (a) that the aircraft is parked in the place on the apron allocated to it by the aerodrome operator; and
 - (b) that the aircraft is parked in the place so allocated in the position required by the aerodrome operator,

and if such operator refuses or fails or is not present to comply forthwith with the terms of such allocation or requirement, the aerodrome operator may have that aircraft parked or positioned so as to comply with the terms of such allocation or requirement and may recover the costs incurred in so parking or positioning that aircraft from the operator of that aircraft and any such action by the aerodrome operator shall not exempt such operation for a prosecution in respect of such refusal or failure.

- (2) Save in an emergency no person shall move an aircraft -
 - (a) from the parking place allocated to it in terms of sub-regulation (2)(a); or
- (b) from the position in which it was placed in terms of sub-regulation (2)(b), except with the approval of the aerodrome operator.

Movement of aircraft on apron on direction of aerodrome operator

139.01.18 (1) The operator of an aircraft which is on the apron shall, on being directed to do so by the aerodrome operator, move such aircraft –

- (a) from the position in which it was placed in terms of regulation 139.01.18(2)(a) to another position in the same parking place;
- (b) from the parking place in which it was parked in terms of regulation 139.01.18(2)(b) to any other parking place on the apron; or
- (c) from the apron,

and if the operator of such aircraft refuses or fails or is not present to comply forthwith with such direction, the aerodrome operator may have such aircraft moved to comply with such direction and may recover the costs incurred in having such aircraft so moved from the operator of such aircraft and any such action by the aerodrome operator shall not exempt such operator from a prosecution in respect of such refusal or failure.

(2) An aircraft moved to another position under the provisions of sub-regulation (1)(a) shall be deemed to have been placed in its new position in terms of regulation 139.01.18(2)(b) and an aircraft moved to another parking place under the provisions of sub-regulation (1)(b) shall be deemed to have been parked in its new parking place in terms of regulation 139.01.18(2)(a).

Movement of vehicles on apron on direction of aerodrome operator

139.01.19 The person in lawful charge of a vehicle on the apron shall, on being directed to do so by the aerodrome operator, move such vehicle –

- (a) to another place on the apron indicated by the aerodrome operator; or
- (b) from the apron,

and if such person refuses or fails or is not present to comply forthwith with such direction, the aerodrome operator may have such vehicle moved to comply with such direction and may recover from such person the costs incurred in having such vehicle so moved and any such action by the aerodrome operator shall not exempt such person from prosecution in respect of such refusal or failure.

Securing of parked aircraft

139.01.20 (1) An aircraft parked on the apron and unattended shall be properly moored or otherwise secured by the operator of such aircraft.

- (2) An aerodrome operator shall
 - (a) make available facilities to enable aircraft operators to safely moor their aircraft.
 - (b) ensure that the operator of an aircraft complies with the requirements of subregulation (1) and (3).
- (3) An aircraft operator shall ensure that appropriate chocks are used to secure the aircraft.

Embarkation or disembarkation of persons in or from aircraft

- **139.01.21** (1) The operator of an aircraft in which persons are to be embarked or from which persons are to be disembarked on the apron shall
 - (a) supervise the embarking or disembarking of persons from such aircraft;
 - (b) if the construction of such aircraft requires the use of passenger steps for embarking or disembarking persons in or from such aircraft, ensure that passenger steps have been correctly and securely placed at each aircraft door which is to be used for embarking or disembarking persons in or from such aircraft before persons embark in or disembark from such aircraft.
- (2) Save in an emergency or with the approval of the aerodrome operator, no person shall on a licensed aerodrome embark in or disembark from an aircraft except on the apron.
- (3) If aircraft refuelling is performed with passengers on board, or passengers boarding the aircraft provide a cabin crew member equipped with a fire extinguisher at each door.
- (4) The PIC of an aircraft that is being refuelled with passengers on board shall ensure that the no smoking sign is lit and the passengers advised of extra safety procedures.
- (5) If required by the aerodrome operator, the fire fighting services shall be placed on standby when refuelling with passengers on board is being performed.

Loading or unloading cargo in or from aircraft

- **139.01.22** (1) The operator of an aircraft which is to be loaded or unloaded on the apron shall
 - (a) ensure that all working holds and doors of such aircraft are open to permit the efficient loading or unloading of such aircraft;
 - (b) ensure that proper labels are affixed to all items of cargo which are to be carried in such aircraft;
 - (c) supervise the loading or unloading of such aircraft and ensure, when such aircraft is being loaded, that each item of cargo is placed in its appropriate place in such aircraft without any damage to the aircraft; and
- (d) if the aircraft is damaged during the loading or off loading of cargo, establish procedure where this can be reported prior to the departure of such aircraft.
- (2) Save in an emergency or with the approval of the aerodrome operator, no person shall, on a licensed aerodrome, load cargo in or unload cargo from an aircraft except on the apron.

Supply of fuel to aircraft

- **139.01.23** (1) No person shall on a licensed aerodrome or heliport supply any fuel to any aircraft except at a place and in a manner approved by the aerodrome or heliport operator.
- (2) The aerodrome operator shall have a signed copy of the refuelling procedure available for audit purposes as prescribed in Document SA-CATS 139.
- (3) The aerodrome operator shall institute measures to periodically monitor the refuelling processes to ensure compliance with the agreed upon procedure is maintained.
- (4) The aerodrome or heliport operator may subject any approval granted in terms of subregulation (1), to compliance with such conditions as the aerodrome or heliport operator may consider necessary to impose in order to safeguard persons or property on the aerodrome.
- (5) The aerodrome operator shall institute measures to address any identified non-conformance and to keep record thereof.
- (6) The aerodrome operator shall ensure that fixed installation refuelling facilities are provided with emergency cut-off switches that is clearly marked and situated in an area where it can be reached without danger to persons in the event of an emergency.

Boarding or tampering with aircraft

- **139.01.24** Except with the permission of the person in lawful charge of an aircraft no person shall, on a licensed aerodrome or heliport
 - (a) board such aircraft other than doing so under the direction of the aircraft operator; or
 - (b) tamper or interfere in any way whatsoever with such aircraft or anything used in connection with such aircraft.

Test-running of aircraft engines

139.01.25 No person shall test-run an aircraft engine on a licensed aerodrome or heliport except at a place designated for the purpose by the aerodrome or heliport operator.

Regulation of vehicular or other traffic on a licensed aerodrome or heliport

139.01.26 The National Road Traffic Act, 1996 (Act No. 93 of 1996), and the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the regulations contained in this subpart and in subpart 2 shall apply to all roads on a licensed aerodrome or heliport as prescribed in Doc SA-CATS 139.

Entering or leaving aerodrome or heliport

- **139.01.27** (1) No person, other than a person entering or leaving a licensed aerodrome or heliport by means of an aircraft landing at or taking off from the aerodrome or heliport, shall enter or leave the aerodrome or heliport otherwise than through a gate or entrance provided by the aerodrome or heliport operator.
- (2) Any person who is directed by an authorised officer, inspector or authorised person to leave the aerodrome or heliport, or any part thereof, shall forthwith do so.

Animals in restricted area of aerodrome or heliport

- **139.01.28** (1) No person shall cause or permit any animal to graze or feed in the restricted area of a licensed aerodrome or heliport unless such animal is to be transported on a flight.
- (2) Any person bringing an animal into the restricted area of the aerodrome or heliport, or receiving an animal in the restricted area of the aerodrome or heliport, shall ensure that such animal is at all times under proper control while it remains in the restricted area of the aerodrome or heliport.

Acts prohibited on aerodrome, heliport or in terminal building

139.01.29 (1) No person shall on a licensed aerodrome or or a licensed or approved heliport –

- (a) obstruct or interfere with the proper use of the aerodrome or heliport;
- (b) obstruct any person in the full-time employment of the aerodrome or heliport operator acting in the execution of his or her duty in relation to the aerodrome or heliport;
- (c) remove any notice board erected by the aerodrome or heliport operator, or with the permission of the aerodrome or heliport operator, or any writing or document displayed on such notice board, or deface any such writing or document or any marking on such notice board or document;
- (d) throw, leave or drop anything capable of causing injury to any person or animal or damage to any property;
- (e) dump any waste matter whatsoever elsewhere than at a place approved for the purpose by the aerodrome or heliport operator;
- (f) commit any act which amounts to nuisance, or commit a disorderly or indecent act or be in a state of intoxication or behave in a violent or offensive manner to the offence or annoyance of other persons on the aerodrome or heliport or make use of offensive language;
- (g) write, draw or affix any profane, obscene, indecent or abusive word, matter, presentation or character on the aerodrome or heliport, or on property on the aerodrome or heliport;
- (h) dump or spill any substance capable of causing water pollution, whether such substance is a solid, liquid, vapour or gas or combination thereof, elsewhere than at a place approved for that purpose by the aerodrome or heliport operator;

- (i) provide false information including a bomb threat that result in the deployment of the aerodrome emergency services.
- (j) misuse the fire crash alarm for any other purposes than for deployment of the emergency services for an actual emergency, unless a request from a civil aviation authorities authorised person, or the aerodrome fire chief or his delegate is received for the purposes of determining compliance with licensing audit requirements.
- (2) Except with the written permission of the aerodrome or heliport operator, no person shall
 - (a) bring a vehicle into or drive a vehicle in or into a terminal building on a licensed aerodrome or licensed or approved heliport;
 - (b) obstruct an entrance to or a passage in such terminal building in such a manner as to inconvenience other users of the entrance or passage concerned; or
 - (c) walk or drive across any live taxiway or runway.
- (3) Except with the written permission of the aerodrome or heliport operator, no person shall on a licensed aerodrome or licensed or approved heliport or on any public road or parking area adjacent to such aerodrome or heliport
 - (a) damage, interfere or tamper with any part of the aerodrome or heliport or any equipment associated with the operation of the aerodrome or heliport;
 - (b) climb any wall, fence, barrier, railing, gate or post;
 - (c) wash or otherwise clean or polish a vehicle elsewhere than at a place approved for that purpose by the aerodrome or heliport operator;
 - (d) cut, dig, damage or remove any soil, grass, tree, shrub or flower;
 - (e) go on to or damage any flower-bed or anything growing therein;
 - (f) remove, pick or otherwise damage any tree, shrub, plant or flower;
 - (g) go on to a lawn or on to ground which has been seeded or planted for the purpose of growing grass to form a lawn;
 - (h) advertise;
 - (i) display any poster, banner or anything similar, except name plates for the purpose of meeting and collection;
 - (j) handle any baggage or confront passengers to carry their baggage;
 - (k) tout for any services, including public transport, taxi, car valet, accommodation, parking and car-wash services; or
 - solicit for funds.
- (4) The right of admission to terminal buildings on a licensed aerodrome or licensed or approved heliport is strictly reserved, and signs to this effect shall be erected in a conspicuous place near all entrances to terminal buildings.
- (5) The aerodrome or heliport operator, the aerodrome or heliport manager or a security officer acting on his or her behalf, and members of the South African Police Service may request any person on the licensed aerodrome or licensed or approved heliport or on premises of such

aerodrome or heliport to explain reasons for being there, and if an acceptable reason cannot be furnished, order that person to leave the aerodrome or heliport and its premises.

- (6) A person who is ordered by the aerodrome or heliport operator of a licensed aerodrome or a licensed or approved heliport, the aerodrome or heliport manager or a security officer acting on his or her behalf, or a member of the South African Police Service to leave the aerodrome or heliport and its premises, and fails to do so forthwith, shall be guilty of an offence.
- (7) The aerodrome or heliport operator of a licensed aerodrome or a licensed or approved heliport, the aerodrome or heliport manager or a security officer acting on his or her behalf, or a member of the South African Police Service may carry out a search of any article, parcel or baggage in possession of, or under the control of, an undesirable person, vagrant, loiterer or other suspected person.
- (8) No person shall on a licensed aerodrome or licensed or approved heliport carryon any trade or business unless he or she is the holder of a valid permit, licence or concession, issued by or on behalf of the aerodrome or heliport operator, which entitles the holder thereof to carry on the trade or business specified on that particular aerodrome or heliport.
- (9) No person shall provide false information that will necessitate the deployment of the emergency services, or might have as result that the fire alarm is sounded.

Obstacle limitations and markings outside aerodrome or heliport

- **139.01.30** (1) All objects, whether temporary or permanent, which project above the horizontal surface within a specified radius of 8 kilometres as measured from the aerodrome reference point should be marked as specified in Document SA-CATS 139.
- (2) Any other object which projects the horizontal surface beyond these radii or above the conical surface and which constitutes a potential hazard to aircraft must be marked as specified in Document SA-CATS 139.
- (3) Buildings or other objects which will constitute an obstruction or potential hazard to aircraft moving in the navigable air space in the vicinity of an aerodrome, or navigation aid, or which will adversely affect the performance of the radio navigation or instrument lading systems, must not be erected or allowed to come into existence without the prior approval of the Director.
- (4) No buildings or objects higher than 45 metres above the mean level of the landing area, or, in the case of a water aerodrome or heliport, the normal level of the water, must without the approval of the Director be erected within a distance of 8 kilometre measured from the nearest point on the boundary of an aerodrome or heliport.
- (5) No building, structure or object which projects above a slope of 1 in 20 and which is within 3000 metres measured from the nearest point on the boundary of an aerodrome or heliport must, without the prior approval of the Director be erected or be allowed to come into existence.

- (6) No building, structure or other object which will project above the approach, transitional or horizontal surfaces of an aerodrome or heliport must, without the prior approval of the Director, be erected or allowed to come into existence.
- (7) The obstacle limitation surface as prescribed in Document SA-CATS 139 must be clear of any penetration of obstacles temporary or otherwise.
- (8) In the event of a conflict of interest between land use authorities and air space users, air safety must be regarded as predominant and not to be compromised by land development projects or other obstacles.

Lead in lights

- **139.01.31** (1) In the event that the Director so requires, the licence holder of an aerodrome or heliport shall ensure that such an aerodrome or heliport has runway lead in light system which -
- (a) provides visual guidance along a specific approach path;
- (b) assists in the avoidance of hazardous terrain; or
- (c) assists in noise abatement as prescribed in Document SA-CATS 139.

Surface movement guidance and control system

- **139.01.32** (1) All aerodromes shall have surface movement guidance and control system as prescribed in Document SA-CATS 139, implemented.
- (2) Where an advanced surface movement guidance and control system has been implemented, the provisions of sub-regulation (3) and (4) shall be applicable.
- (3) Where stop bars are specified as components of an advanced surface movement guidance and control system and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications prescribed in Document SA-CATS 139.
- (4) Where taxiway centre line lights are specified as components of a advanced surface movement guidance and control system and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, taxiway centre line lights shall be in accordance with the specifications prescribed in Document SA-CATS 139.

SUBPART 2: LICENSING AND OPERATION OF AERODROMES

Requirements for licence

- **139.02.1** (1) All aerodrome licence holders shall be in possession of a valid aerodrome licence.
- (2) The issue and renewal of an aerodrome licence shall be subject to the aerodrome complying with the Regulations, as complemented by the standards contained in the relevant ICAO Annexes and Documents, listed in Document SA-CATS 139, and any recommended practice contained in these documents which the Director may have incorporated as a standard.
- (3) Compliance with said regulations and standards, for the purposes of issuing or renewal of a licence shall be determined by means of audit procedures and inspections, by the Authority, at various times, as determined by the Director, during the preceding licence period or before the issuing of a new licence.
- (4) The Authority shall levy fees from aerodrome licence holders, upon renewal or issuing of an aerodrome licence, in accordance with the tariffs as prescribed in Part 187.

Aerodrome design requirements

- **139.02.2** (1) An applicant for the issuing of an aerodrome licence shall ensure that the aerodrome is provided with
 - (a) physical characteristics;
 - (b) obstacle limitation surfaces;
 - (c) visual aids for
 - (i) navigation;
 - (ii) denoting obstacles; and
 - (iii) denoting the restricted area;
 - (d) equipment and installations;
 - (e) an airspace classification referred to in Part 172; and
 - (f) an appropriate level of fire fighting services compliant with the licence application,

appropriate to the characteristics of the aircraft it intends to serve, the lowest meteorological minima for each runway, and the ambient light conditions during the operation of aircraft.

- (2) The physical characteristics, obstacle limitation surfaces, visual aids, and equipment and installations provided at the aerodrome shall comply with the appropriate aerodrome design standards as prescribed in Document SA-CATS 139.
- (3) The licence holder of an aerodrome used for international operations shall provide a runway lead-in lighting system as prescribed in Document SA-CATS 139, to provide positive visual guidance along a specific approach path, generally a curved one, where problems exist with
 - (a) hazardous terrain;
 - (b) obstructions; and
 - (c) noise abatement procedures.

- (4) All licensed aerodromes used for international operations must have surface movement guidance and control systems commensurate with the level of operation as determined by the Director and as as prescribed in Document SA-CATS 139.
- (5) In instances where stop bars are specified as components of an advanced surface movement—guidance and control system and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications as prescribed in Document SA-CATS 139.
- (6) In instances where taxiway centre line lights are specified as components of an advanced surface movement guidance and control system, and where higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, taxiway centre line lights shall be in accordance with the specifications as prescribed in Document SA-CATS 139.

Operations manual

- **139.02.3** An applicant for the issuing of an aerodrome licence higher than Category 2 or for an aerodrome where scheduled commercial operations are to be conducted shall provide the Director with an operations manual which shall contain
 - (a) a statement by the accountable manager and compliance officer confirming that the operations manual and any included manuals define the organisation of the applicant and demonstrate the procedures and methods for ensuring that the provisions of the regulations in this part will be complied with at all times;
 - (b) particulars of the personnel referred to in regulation 139.02.5(1);
 - (c) an organisational chart showing lines of responsibility of the personnel referred to in regulation 139.02.5(1);
 - (d) the limitations of the use of the aerodrome referred to in regulation 139.01.3 or any other limitation considered necessary by the Director;
 - (e) a description of the characteristics of and the infrastructure available at the aerodrome, which, taking into consideration the limitations referred to in paragraph (d), comply with the aerodrome design requirements referred to in regulation 139.02.2;
 - (f) the aerodrome emergency management system referred to in regulation 139.02.6;
 - (g) a description of the aerodrome's rescue and fire fighting capability which, taking into consideration the limitations referred to in paragraph (d), complies with the requirements prescribed in regulation 139.02.7;
 - (h) the aerodrome environment management programme referred to in regulation 139.02.8;

- (i) the procedures for the notification of aerodrome data and information referred to in regulation 139.02.9;
- (j) the quality assurance system referred to in regulation 139.02.4;
- (k) a description of the security measures taken at the aerodrome to comply with the provisions of the Act, and the regulations made thereunder;
- (I) the procedures to control, amend and distribute the operations manual;
- (m) where applicable, the intended air traffic services and the approach and airspace categories; and
- (n) safety procedures pertaining to all apron operations that are carried out on the aerodrome.

Quality assurance system

- **139.02.4** (1) The applicant for the issuing of an aerodrome licence higher than Category shall establish a quality assurance system containing an aviation safety programme, for the control and supervision of the operation and maintenance of the aerodrome and its services and facilities in accordance with the regulations in this subpart.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 139.

Personnel requirements

- **139.02.5** (1) The applicant for an aerodrome licence shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of in writing by the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - (i) Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect or such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected:

- (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
- (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person in writing who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting the aviation safety programme; and
- (c) adequate personnel, including an aerodrome manager and ATS personnel, and sufficient and adequate rescue and fire fighting personnel, to operate and maintain the aerodrome and its services and facilities according to the requirements prescribed in this subpart.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in operating and maintaining the aerodrome and its services and facilities in accordance with an Authority or SAQA approved training organization standards.

Establishment of aerodrome emergency management system

- **139.02.6** (1) The applicant who is required to submit an operations manual under regulation 139.02.3 shall establish an aerodrome emergency management system as prescribed in Document SA-CATS 139, designed to minimise the possibility and extent of personal injury and property damage on, or in the vicinity of, the aerodrome.
- (2) The aerodrome emergency management system referred to in sub-regulation (1) shall
 - (a) provide for all types of emergencies likely to take place on, or in the vicinity of, the aerodrome: and
 - (b) include
 - (i) an index depicting all aspects contained in the system;
 - (ii) the types of emergencies planned for;
 - (iii) call out procedures for prompt response to emergencies planned for;
 - (iv) the persons involved in executing the allocated tasks;
 - (v) sufficient detail to provide adequate guidance to each person responsible for executing such system;
 - (vi) provision for a fully equipped emergency operations centre and command post for each type of emergency which may be encountered;
 - (vii) a description of all available rescue and medical equipment and the location of such equipment;

- (viii) information on the particulars of personnel and persons to be contacted in the case of a particular emergency;
- (ix) a grid map of the aerodrome indicating available water resources and other landmarks of significance; and
- (x) a grid map indicating of the aerodrome and its surrounding up to a radius of ten kilometers indicating the location of hospitals, clinics and road layout.

(3) The applicant shall –

- (a) co-ordinate the proposed emergency management system with all personnel and persons who have allocated responsibilities in terms of the system;
- (b) to the extent practicable, provide for participation of all personnel and persons referred to in paragraph (a), in the establishment of the system; and
- (c) indicate what capability is available for aircraft recovery after an aircraft accident.

Aerodrome rescue and fire fighting

- **139.02.7** (1) The applicant shall ensure that the aerodrome is provided with a rescue and fire fighting service, capable to provide the required level of protection necessary for maintaining the minimum level of protection required for the appropriate category of aerodrome.
- (2) The classification matrix of aerodrome licence categories, aircraft categories for fire fighting, aircraft overall length categories and aircraft maximum fuselage width categories shall be as prescribed in Document SA-CATS 139.
- (3) An applicant for the issuing of an aerodrome licence, in the Categories 1 to 4, shall determine the appropriate aircraft category for fire fighting in accordance with the following principles as well as the principles prescribed in Document SA-CATS 139:
 - (a) Aerodromes up to aircraft category 4 for firefighting may be licensed one category lower, where aircraft with less than 30 passenger seats operate into such aerodrome and where the number of aircraft movements is less than 30 per week.
 - (b) Other than when the principle in paragraph (a) above applies, the aircraft category for firefighting must be equivalent to the category of the aerodrome licence.
 - (c) Where aircraft with 30 or more passenger seats operate into an aerodrome, the aircraft category for firefighting must be provided at a minimum of category 4 level: Provided that aircraft classified one category higher in terms of the classification matrix may operate into such aerodrome using the principles identified in paragraph 1 of technical standard 139.02.7.
 - (d) The Director may, upon application in writing by an operator of an aerodrome, exempt such operator from the requirement of paragraph (b), in the case of aircraft which may be classified in two or more categories above the aerodrome licence category 2 or 4, respectively,

- (e) In accordance with the risk assessment described in paragraph (2)(a) of technical standard 139.02.7, the operator of an aerodrome shall establish an aerodrome emergency management system (AEMS) for mitigating risk and included the particulars of such emergency management system in the operations manual referred to in regulation 139.02.3.
- (4) A discreet communication system shall be provided, linking a fire station with the control tower, or, where applicable, with any other fire station on the aerodrome, and the rescue and fire fighting vehicles.
- (5) An alerting system for rescue and fire fighting personnel shall be provided at the fire station, or at any remote fire station on the aerodrome and at the aerodrome control tower.
- (6) Emergency access roads shall be provided on an aerodrome where the minimum response times as prescribed in Document SA-CATS 139 cannot be achieved and where the terrain conditions permit their construction.
- (7) Where the airport is fenced, access to the outside areas shall be facilitated by the provision of emergency gates, which shall be marked to indicate their purpose and the prohibition of vehicle parking and obstructions in their immediate vicinity control of these gates shall be under the direct control of the fire fighting services.
- (8) Emergency access roads shall be capable of supporting the heaviest emergency vehicles and shall be accessible in all weather conditions.
- (9) The roads within 90 m of a runway shall be surfaced to prevent surface erosion and transfer of debris to the runway.
- (10) Sufficient vertical clearance shall be provided from overhead obstructions for the largest vehicles.
- (11) When the surface of the road is indistinguishable from the surrounding area, or in areas where snow may obscure the location of the road edge, markers shall be placed at intervals of about 10 m.

Aerodrome rescue and fire fighting training facility

- **139.02.8** (1) The holder of an aerodrome licence operating on a category 6 level or higher shall establish a training facility simulating an aircraft structure that makes provision for effective training standards as prescribed in Document SA-CATS 139.
- (2) The holder of an aerodrome licence operating a category 3 where flying schools have been established and category 4 or 5 shall establish a fire fighting training facility as prescribed in Document SA-CATS 139.
- (3) The holder of an aerodrome licence operating below a category 4 level, including category 3 aerodromes where flying schools have been established, shall establish a fire fighting training facility as prescribed in Document SA-CATS 139.

(4) The training facilities shall give effect to the personnel training standards provided for in regulation 139.02.34 and the associated technical standards.

Aerodrome rescue and fire fighting personnel training standards

- **139.02.9** (1) The holder of an aerodrome licence shall establish an aerodrome rescue and fire fighting services personnel training standards as prescribed in Document SA-CATS 139.
- (2) The basis for the training standards of aerodromes below a category 3 level is prescribed in Document SA-CATS 139.

Aerodrome rescue and fire fighting deviations

- **139.02.10** (1) The holder of an aerodrome licence shall provide on the aerodrome the rescue and fire fighting capability which complies with the minimum requirements prescribed in regulation 139.02.7.
- (2) The rescue and fire fighting service shall be provided in accordance with the standards prescribed in Document SA-CATS 139.
- (3) The holder of the licence may deviate from any requirement prescribed in this subpart to the extent required to attend to an emergency arising from any aviation accident or incident which occurs on, or within a radius of 10 kilometres from, the aerodrome.
- (4) A deviation in terms of sub-regulation (3) shall only be permitted
 - (a) for the period during which the emergency exists; and
 - (b) for the sole purpose of protecting life or property.
- (5) The holder of the licence shall ensure that the remainder of the rescue and fire fighting personnel and equipment will be able to attend to any possible aviation accident or incident which may occur as a result of the emergency referred to in sub-regulation (3) until assistance is obtained from other participants in the aerodrome emergency management system.
- (6) (a) If an aerodrome operator has to deviate from the required standard, the Air Traffic Control shall be informed of the deviation and indicate to what category the remainder of the service can be provided; and
- (b) Until the required service commensurate with the aerodrome licence is re-instated, the Air traffic Controller must convey this information to all arriving and departing aircraft, the PIC must clearly indicate that they accept the lower category of fire fighting service prior to commencement of a flight, or before landing.
- (7) The holder of the licence who deviates in terms of sub-regulation (3) from any requirement prescribed in this subpart, shall
 - (a) notify the Director immediately of the nature of the emergency and the extent of the deviation; and

(b) submit a comprehensive report to the Director within 14 days from the date on which the emergency arose.

Establishment of aerodrome environment management programme

139.02.11 (1) The applicant shall, in the area within its authority and where any foreign object debris (FOD), oil and fuel spillages, bird and wildlife presents or are likely to present a hazard to aircraft operating to or from the aerodrome, establish an aerodrome environment management programme to minimise the effects of such hazard or potential hazard, taking due cognisance of the provisions of the Environment Conservation Act, 1989 (Act No. 73 of 1989), and the regulations made thereunder.

- (2) The aerodrome operator shall ensure that environmental management meeting is conducted with interval not exceeding three months and that
 - (a) the minutes of the meetings must be kept and must clearly indicate all identified environmental issues that may affect the operations;
 - (b) the meetings must address all environmental issues within the boundaries of the aerodrome and in the immediate vicinity up to a radius of 10 kilometre that might affect the aerodrome operations negatively.
 - (c) mitigating measures to rectify all identified environmental issues must be recorded for audit purposes. This includes communication with external parties.

Notification of aerodrome data and information

139.02.12 (1) An applicant for the issuing of an aerodrome licence must establish a procedure to notify the ATSU concerned and the Director –

- (a) of the aerodrome data and information;
- (b) of any limitation on the use of the aerodrome contemplated in regulation 139.01.3;
- (c) compliance with regulation 139.02.7 or deviation therefrom;
- (d) as soon as possible, of any change which may affect the use of the aerodrome, including the presence of water on the runway as prescribed in Document SA-CATS 139;
- (e) any other information required in terms of regulations in Part 175.
- (2) A notification contemplated in sub-regulation (1) must be made on the appropriate prescribed form.

Application for licence or amendment thereof

139.02.13 An application for the issuing of an aerodrome licence, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the operations manual referred to in regulation 139.02.3;
 - (ii) the plans of the aerodrome;
 - (iii) written approval from the local government concerned;
 - (iv) an environmental impact report, if required in terms of the Environment Conservation Act, 1989;
 - (v) written approval from all interested Government institutions;
 - (vi) proof that the applicant is financially capable of operating the aerodrome including the provision of fire fighting service as contemplated in regulation 139.02.7;
 - (vii) particulars of non-compliance with, or deviations from
 - (aa) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
 - (viii) the appropriate fee as prescribed in Part 187.

Processing of application for licence or amendment thereof

- **139.02.14** (1) The Director shall, as soon as practicable after the receipt of an application for an aerodrome licence, or an amendment thereof, publish by notice in the *Gazette* the following particulars in respect of the application concerned:
 - (a) The full name of the applicant;
 - (b) full particulars of the location of the aerodrome; and
 - (c) a reference to the date by which the representations referred to in sub-regulation (2) must be submitted to the Director.
- (2) Any person may, after the publication of the notice referred to in sub-regulation (1) address in writing representations to the Director against or in favour of the application concerned.

Adjudication of application for licence or amendment thereof

- **139.02.15** (1) The Director shall as soon as practicable consider an application referred to in regulation 139.02.11 together with all representations, information and other documents relating to such application which are received within the period specified in the notice published in terms of regulation 139.02.12(1).
- (2) The Director may grant the application if the Director is satisfied that
 - (a) the applicant complies with the requirements prescribed in regulations 139.02.2 to 139.02.10 inclusive; and
 - (b) granting the application will not jeopardise aviation safety.

Issuing of licence

- **139.02.16** (1) An aerodrome licence shall be issued on the appropriate prescribed form.
- (2) The licence shall specify
 - (a) the category for which the aerodrome is licensed; and
 - (b) the restrictions, if any, relating to non-compliance with, or deviations from
 - (i) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; and
 - (ii) the appropriate airspace classification requirements prescribed in Part 172.

Period of validity

- **139.02.17** (1) An aerodrome licence shall be valid for the period determined by the Director, which period shall be valid for 12 months, calculated from the date on which the licence is issued or renewed.
- (2) The licence shall remain in force until it expires or is suspended or downgraded_by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of a licence which expires, shall forthwith surrender the licence to the Director.
- (4) The holder of a licence which is suspended, shall forthwith produce the licence upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of a licence which is cancelled, shall, within 30 days from the date on which the licence is cancelled, surrender such licence to the Director.

Transferability

- **139.02.18** (1) Subject to the provisions of sub-regulation (2), an aerodrome licence shall not be transferable.
- (2) A change in ownership of the holder of a licence shall be deemed to be a change of significance referred to in regulation 139.02.17.

Changes in quality assurance system

- **139.02.19** (1) If the holder of an aerodrome licence desires to make any change in the quality assurance system referred to in regulation 139.02.4(1), which is significant to the showing of compliance with the appropriate requirements prescribed in this part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 139.02.11 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.

(3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to his, her or its operations manual, that the applicant will continue to comply with the provisions of regulations 139.02.2 to 139.02.10 inclusive, after the implementation of such approved change.

Renewal of licence

- 139.02.20 (1) An application for the renewal of an aerodrome licence shall be -
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the updated operations manual referred to in regulation 139.02.3, if required by the Director;
 - (ii) proof of adequate funding;
 - (iii) proof of what level of fire services will be provided;
 - (iv) particulars of non-compliance with, or deviations from -
 - (aa) the appropriate aerodrome design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
 - (v) the appropriate fee as prescribed in Part 187.
- (2) The holder of the licence shall at least 60 days immediately preceding the date on which such licence expires, apply for the renewal of such licence.

Licence of intent

- **139.02.21** (1) Where a particular area has been officially demarcated at the appropriate institutional level as contemplated in sub-regulation (2)(b)(iii) for the development of an aerodrome, the proposed holder of an aerodrome licence in respect of the aerodrome, may apply to the Director for the issuing of a licence of intent for such area.
- (2) An application for the issuing of a licence of intent must be
 - (a) made to the Director on the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) full particulars of the particular area demarcated for the development of the aerodrome, and the location thereof;
 - (ii) the appropriate fee as prescribed in Part 187;
 - (iii) written approval from the following institutions for the intended aerodrome development:
 - (aa) for private aerodromes: approval from the relevant local authority;

- (bb) for commercial aerodromes intended for domestic operations: approval from the relevant provincial authority; and
- (cc) for international aerodromes: approval from the Department of Transport; and
- (iv) written comments from the national ATS provider regarding the impact on the existing airspace structure and the feasibility of accommodating the intended aerodrome development in the airspace structure.
- (3) The provisions of regulations 139.02.11 and 139.02.12(1) applies, with the necessary changes, to the processing of an application for the issuing of a licence of intent.
- (4) The Director may grant the application if the Director is satisfied that the application complies with the requirements prescribed in sub-regulations (1) and (2) and that the development of the aerodrome will not jeopardize aviation safety.
- (5) A licence of intent must be issued on the appropriate prescribed form .
- (6) The licence of intent must specify the conditions and the restrictions which the Director considers necessary in the interests of aviation safety.
- (7) A licence of intent is
 - (a) not transferable; and
 - (b) valid for the period determined by the Director, which period must not exceed five years, calculated from the date on which the licence is issued.

General duties of holder of licence

- **139.02.22** (1) The holder of an aerodrome licence must
 - (a) hold at least one complete and current copy of the approved manuals referred to in this subpart, at the aerodrome;
 - (b) comply with all procedures detailed in such approved manuals;
 - (c) make each applicable part of such approved manuals available to the personnel who require those parts to carry out their duties; and
 - (d) continue to comply with the appropriate requirements prescribed in this Part.
- (2) The holder of the licence must ensure that
 - (a) the aerodrome is maintained in a serviceable condition;
 - (b) the aerodrome is kept free of unauthorised persons, vehicles or animals not under proper control, in compliance with the Act;

- (c) all obstructions are marked as prescribed in Document SA-CATS 139;
- (d) the Director is informed of any alterations to or obstructions or workings on the aerodrome;
- (e) an apparatus showing the surface direction of the wind, is installed and functions satisfactorily;
- (f) VHF Direction Finding (VDF) equipment is installed where an ATSU is present on the aerodrome and that it functions satisfactorily to the requirements and specifications as prescribed in Document SA-CATS 139. This requirement may be omitted if the ATSU is serviced by surveillance;
- (g) the markings as prescribed in Document SA-CATS 139, are maintained in a conspicuous condition, readily visible to aircraft in the air or manoeuvring on the ground;
- (h) the accommodation and facilities offered to the public are available and in a serviceable condition:
- (i) all apparatus installed by such holder to promote safety in flight, is functioning efficiently;
- (j) unserviceable areas on the landing terrain are appropriately marked as prescribed in document SA-CATS 139;
- (k) the Director is informed whenever an aerodrome becomes unserviceable through any cause or whenever any portion of the surface of the landing area deteriorates to such extent that the safety of an aircraft may thereby be endangered, and aircraft operations are limited to those portions of the aerodrome not rendered unsafe by those conditions;
- (I) such reports on the condition of the aerodrome as may be required from time to time by the Director, are submitted to the Director;
- (m) the particulars of a foreign operator's permit are obtained and verified, in the case where a foreign aircraft which is used by virtue of such foreign operator's permit issued in terms of section 26(1) of the International Air Services Act, 1993 (Act No. 60 of 1993), lands at the aerodrome;
- (n) a survey is carried out on the aerodrome for the purposes of the approval of letdown procedures by the Director whenever any significant changes have occurred;
- (o) (i) Where an ATSU is present on the aerodrome or where scheduled commercial operations are conducted, or where unscheduled commercial operations exceeding 6 movements a week are conducted and the MCM of

the aeroplanes involved exceeds 5700 kilograms, sensing equipment will be installed to technical specifications as per Document SA-CATS 139 to provide data to the air traffic service, the specifications of which are mentioned in Document SA-CATS 139;

- (ii) Such data must be displayed in the aerodrome control tower or ATSU and the aeronautical meteorological station where applicable;
- (iii) Where an ATSU is not in operation and where scheduled commercial operations occur, such data must be transmitted automatically to a minimum range of 5nm from the aerodrome reference point;
- (iv) All licensed aerodromes supporting pilot training operations must make wind direction, speed, surface air temperature and barometric pressure data available at a location accessible to pilots prior to take off;
- (v) If the aerodrome is used for flights coming from outside the borders of the Republic or for flights departing to a destination outside the Republic, it has to ensure that satisfactory office facilities are available for an aeronautical meteorological station.
- (p) the surface of a runway is maintained in a condition such as to prevent formation of harmful irregularities, as prescribed in Document SA-CATS 139;
- (q) measurements of the friction characteristics of a runway surface are made with a continuous friction measuring device using self-wetting features, in accordance with the minimum friction survey frequency as prescribed in Document SA-CATS 139;
- (r) corrective maintenance action is taken when the friction characteristics for either the entire runway or a portion thereof are below the minimum friction level as prescribed in Document SA-CATS 139;
- (s) when there is a reason to believe that the drainage characteristics, for either the whole runway or a portion thereof, are poor due to slopes or depressions, that the runway friction characteristics are assessed under natural or simulated conditions which are representative of local precipitation conditions, and that, corrective maintenance action is taken as necessary;
- (t) the surface of a paved runway is maintained in such condition so as to provide good friction characteristics and low rolling resistance;
- snow, slush, ice, standing water, mud, dust, sand, oil, rubber deposits and other contaminants are removed as rapidly and completely as possible to minimise accumulation;
- (v) for aerodromes category 3 and above, a full set of the Civil Aviation Regulations that contain the latest amendments are available at the aerodrome:
- (w) for aerodromes category 3 and above, the respective departments/ sections have available a set of the ICAO annexes and documents relevant to their area of responsibility.

- (3) The holder of the licence must
 - (a) furnish the Director with the aerodrome financial data and the aerodrome traffic statistics as prescribed in Document SA-CATS 139;
 - (b) in the case of aerodrome which serves aircraft used in international public air transport operations, establish a facilitation committee and compile a facilitation plan in accordance with the requirements and standards as prescribed in Document SA-CATS 139:
 - (c) be responsible for the monitoring of aircraft noise on and in the vicinity of an aerodrome, and the reporting of violations to the Director, in accordance with the requirements and standards as prescribed in Document SA-CATS 139;
 - (d) when the ATSU at the aerodrome is not in operation, be responsible for the maintenance of flying discipline on, and in the vicinity of, such aerodrome;
 - (e) furnish in writing to the Director as soon as practically possible, but within thirty days from the day of engagement, employment or contracting, the accountable manager and compliance officer referred to in regulation 139.02.5(1)(a), with that person's full particulars.
 - (f) furnish the Director with the bearing strength of a pavement on completion of the construction, or whenever major repair work has been conducted which affects the pavement bearing strength;
 - (g) report the following information on the bearing strength of a pavement using the aircraft classification number pavement classification number method as prescribed in Document SA-CATS 139:
 - (i) the pavement classification number;
 - (ii) pavement type for aircraft classification number–pavement classification number determination:
 - (ii) sub-grade strength category;
 - (iv) maximum allowable tire pressure category or value; and
 - (v) evaluation method:
 - (h) furnish the Director on monthly basis with the statistical data of incidents and accidents occurring on the airside of the aerodrome as prescribed in Document SA-CATS 139
- (4) (a) The holder of the licence must ensure that
 - (i) all originating hold baggage to be carried on a commercial air transport aeroplane engaged in international civil aviation operations are screened prior to being loaded onto the aircraft:

- (ii) the operator of a commercial air transport aeroplane engaged in a scheduled commercial air service does not carry any originating hold baggage unless such baggage has been screened prior to being loaded into the aircraft.
- (b) The minimum requirements for the procedures referred to in paragraph (a) above are prescribed in Document SA-CATS 121.
- (5) The holder of the aerodrome licence is accountable for the implementation of aeronautical studies, inclusive of technical analysis, risk assessment and proposed risk mitigation for any contemplated deviation from Subparts 1 and 2 of Part 139 and the resultant outcome of such studies must be presented to the Director.
- (6) The holder of the aerodrome license must determine procedures to ensure that the personnel operating on airside wear high visibility clothing at all times whilst on airside.

Works on aerodrome

- **139.02.23** (1) The holder of an aerodrome licence shall establish procedures and take precautions to ensure that any works carried out on the aerodrome, do not endanger any aircraft operations.
- (2) The procedures to be established and precautions to be taken in terms of sub-regulation (1), shall be established and taken in accordance with the requirements and standards as prescribed in Document SA-CATS 139.
- (3) No hot work, or work with an open flame shall be performed on the airside of the aerodrome without notifying the fire-fighting services and all other affected parties of
 - (a) the type of work to be performed
 - (b) the location where this work will be performed; and
 - (c) the expected duration of the work to be performed.
- (4) If considered necessary by the licence holder, or if this type of work can have an impact on aviation safety, the fire services shall perform standby duties during such hot work or work with an open flame until the work is completed; and comply with regulation 139.02.9.

Maintenance of aerodrome emergency management system

139.02.24 The holder of an aerodrome licence shall –

- (a) establish procedures to ensure that all participants to the effectiveness of the aerodrome emergency management system (AEMS) with allocated duties or responsibilities, are familiar with, and are properly trained for, their assignments and shall –
 - (i) submit such AEMS to the Authority for approval;

- (ii) provide a copy of the approved AEMS to the South African Search and Rescue (SASAR) coordination centre in accordance with the South African Maritime Search and Rescue Act, 2002 (Act No. 44 of 2002);
- (iii) provide a copy of the approved AEMS to the Provincial Disaster Management Centre in accordance with the Disaster Management Act, 2002 (Act No. 57 of 2002);
- (b) test the effectiveness of such aerodrome emergency management system by
 - (i) undertaking a full-scale aerodrome emergency exercise at intervals not exceeding two years;
 - (ii) arranging special emergency exercises in the intervening year to correct any deficiencies identified during the full-scale aerodrome emergency exercise;
 - (iii) performing a desk top exercise with intervals not exceeding three months to verify roleplayers, contact detail and other vital information required to ensure that the current AEMS is up to date; and
 - (iv) Establish procedure to address all communicable diseases as depicted in Document SA-CATS 139;
- (c) submit a comprehensive written report to the Director within 14 days from the date on which
 - (i) a full-scale aerodrome emergency exercise referred to in paragraph (b)(i); or
 - (ii) special emergency exercise referred to in paragraph (b)(ii), has been undertaken or arranged; and
 - (iii) notify the Authority and all other roleplayers of all changes referred to in paragraph (b) (iii) to the AEMS with intervals not exceeding three months;
- (d) review such aerodrome emergency management system for effectiveness after each of the exercises referred to in paragraph (b), as well as after an actual emergency, to address any deficiencies identified and to adapt such system for the enhancement of its efficiency;

Maintenance of aerodrome environment management programme

139.02.25 The holder of an aerodrome licence shall –

- (a) maintain and comply with the aerodrome environment management programme referred to in regulation 139.02.8; and
- (b) operate the aerodrome in accordance with the provisions of the Environment Conservation Act, 1989, and the regulations made thereunder, together with the recommendations and requirements prescribed in any relevant Specifications or Codes of Practice published under the Standards Act, 1993 (Act No. 29 of 1993).

Aerodrome inspection programme

- **139.02.26** (1) The holder of an aerodrome licence shall establish and maintain an aerodrome inspection programme, including
 - (a) procedures to ensure that job specific competent aerodrome personnel execute the relevant programme effectively; and
 - (b) a reporting system to ensure prompt correction of unsafe aerodrome conditions noted during any inspection,

to ensure compliance with the regulations in this subpart.

(2) The programme referred to in this regulation is prescribed in Document SA-CATS 139.

Demarcation of restricted area

- **139.02.27** (1) The holder of an aerodrome licence shall, on the aerodrome, demarcate a restricted area and indicate its boundaries by means of
 - (a) markings on the surface of such aerodrome;
 - (b) obstructions or notices erected along the boundaries of such restricted area or a fence commensurate with the level of threat;; or
 - a combination of such markings, fences, obstructions or notices to achieve the desired level of control.
- (2) Subject to the provisions of sub-regulation (1) relating to the manner in which such boundary shall be indicated, the holder of the licence may alter any boundary or any portion of a boundary of the restricted area.
- (3) Fences or obstructions or notices erected along the boundaries of such restricted area shall have emergency access gates inline or as close as possible to the threshold of all available runways to ensure an acceptable response times can be met.
- (4) These emergency gates shall not be used for gaining access to the aerodrome but should be solely for emergencies inside or outside the aerodrome perimeter. The control of these emergency gates shall be the responsibility of the fire fighting service.

Control of entry into restricted area

- **139.02.28** (1) The holder of an aerodrome licence must exercise control over entry into a restricted area.
- (2) The control referred to in sub-regulation (1) must be exercised according to the procedures and criteria approved by such holder.
- (3) An authorised officer, inspector or authorised person may
 - (a) prohibit any person from entering a restricted area;

- (b) order any person to leave a restricted area immediately, whether such person has been granted permission to be within a restricted area or not.
- (4) A fence or other suitable barrier must be provided on an aerodrome to
 - (a) prevent the entrance to the movement area of animals large enough to be a hazard to aircraft; and
 - (b) deter the inadvertent or premeditated access of an unauthorised person onto a non-public area of the aerodrome.
- (5) Suitable means of protection must be provided to deter the inadvertent or premeditated access of an unauthorised person into ground installations and the facilities located off the aerodrome, which is essential for the safety of civil aviation.
- (6) The fence or barrier must be located so as to separate the movement area and other facilities or zones on the aerodrome vital to the safe operation of aircraft from areas open to public access.
- (7) When greater security is deemed necessary
 - (a) a cleared area should be provided on both sides of the fence or barrier to facilitate the work of patrols, and to make trespassing more difficult; and
 - (b) consideration should be given to the provision of a perimeter road inside the fencing for use of both the maintenance personnel and security patrols.
- (8) A licensed aerodrome must
 - (a) have a fence or other barrier for the protection of civil aviation; and
 - (b) where it is deemed desirable for security reasons, have lights at a minimum essential level located in such a way that the ground area on both sides of the fence or barrier, particularly at the access points, is illuminated.
- (9) During low visibility operation procedures, the holder of an aerodrome licence must restrict construction or maintenance activities in the proximity of aerodrome electrical systems as prescribed in Document SA-CATS 139.

Demarcation of routes on apron

- **139.02.29** (1) The holder of an aerodrome licence shall be means of markings on the surface of an aerodrome or by notices, or by means of both such markings and notices demarcate routes on the apron for use by
 - (a) persons other than a person carried in an aircraft or in or on a vehicle;
 - (b) aircraft travelling on the surface of an aerodrome; or
 - (c) vehicles and equipment,

and such holder may similarly restrict any such route to use by such person or aircraft or vehicle for the purpose of movement in one direction only.

- (2) Save in an emergency no person
 - (a) other than a person carried in an aircraft or in or on a vehicle must proceed on foot on the apron; or
 - (b) must move an aircraft travelling on the surface of an aerodrome or a vehicle on the apron,

except along an appropriate route demarcated in terms of sub-regulation (1).

- (3) Save in an emergency, or in the event of accident on or in the vicinity of the apron, the emergency services are exempted from making use of these roads, markings or notices to attend to such emergency in the shortest period of time.
- (4) The holder of an aerodrome licence must provide the minimum clearance between an aircraft using the aircraft stand and any adjacent building, any other aircraft parked on another aircraft stand, or any other objects as prescribed in Document SA-CATS 139.

Safety measures against fire

- **139.02.30** (1) The holder of an aerodrome licence shall establish preventative measures against possible fires on the aerodrome and identify a person or group or persons in writing to maintain a fire prevention programme for the aerodrome and aerodrome buildings.
- (2) If the aerodrome has no fire brigade service designated in terms of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), the holder of the licence shall arrange with the local government concerned to maintain a fire prevention programme for the aerodrome buildings on landside and to advise such holder of any dangerous conditions for rectification.
- (3) Unless the local authority's persons received airside induction training the aerodrome rescue and fire fighting services shall be responsible to ensure that fire prevention on airside is maintained, and shall keep proper record of inspections performed and rectification measures instituted.
- (4) The holder of the licence shall ensure that no unsafe practice is performed on the aerodrome or within its parameters.
- (5) If unsafe practices have to be performed during any day-to-day maintenance of, or on, the aerodrome, the holder of the licence shall alert the rescue and fire fighting service concerned to be on standby for the duration of such practices.

Access of ground vehicles to aerodrome movement area

139.02.31 The holder of an aerodrome licence shall -

- (a) limit access to the aerodrome manoeuvring area of those ground vehicles which are necessary for aerodrome and aircraft operations;
- (b) if an ATSU is in operation at the aerodrome, provide adequate procedures for the safe and orderly access to, and operation in the aerodrome manoeuvring area of ground vehicles, in order to ensure that each ground vehicle operating in the aerodrome manoeuvring area is controlled by –
 - (i) two-way radio communication between the vehicle and the ATSU;
 - (ii) if the vehicle has no radio, an accompanying escort vehicle with two-way radio communication with the ATSU is required; or
 - (iii) if it is not practical to have two-way radio communication or escort vehicle, adequate measures including signs, signals or guards for controlling the vehicle;
- (c) if an ATSU is not in operation at the aerodrome, provide adequate measures to ensure that ground vehicles operating in the aerodrome movement area are controlled by the signs, pre-arranged signals or standards as prescribed in Document SA-CATS 139; and
- (d) ensure that each employee, tenant or contractor who operates a ground vehicle on any portion of the aerodrome which has access to the aerodrome movement area is familiar with, and complies with, the rules and procedures for the operation of ground vehicles as prescribed in Document SA-CATS 139.

Protection of navigation aids

139.02.32 The holder of an aerodrome licence shall –

- (a) prevent any construction of facilities on the aerodrome which may adversely affect the operation of any electronic or visual navigation aid or ATS facility on such aerodrome;
- (b) prevent, as far as it is within the authority of the such holder, any interruption of visual or electronic signals of navigation aids;
- (c) liaise with the local government concerned and the Director with regard to any structure higher than the obstacle limitation surfaces on or in the vicinity of the aerodrome; and
- (d) ensure that these facilities are provided with adequate and appropriate fire fighting protection equipment.

Aerodrome abandoned or not maintained

139.02.33 (1) In order that adequate warning may be given to the users of an aerodrome, the holder of an aerodrome licence shall give the Director at least 60 days written notice of its intention to discontinue the maintenance of the aerodrome or to abandon the aerodrome.

(2) If, after the expiry of the period of notice referred to in sub-regulation (1), an aerodrome is abandoned or is not being maintained in accordance with the conditions of the licence, the

holder of the licence shall remove, obliterate or modify all aerodrome markings as the Director may direct.

(3) On completion of the task, referred to in sub-regulation (2), the holder shall surrender the licence to the Director.

SUBPART 3: LICENSING AND OPERATION OF HELIPORTS

Requirements for licence

- **139.03.1** (1) All heliport licence holders shall be in possession of a valid heliport licence.
- (2) The issue and renewal of a heliport licence shall be subject to the heliport complying with the regulations, as complemented by the standards contained in the relevant ICAO Annexes and Documents listed in Document SA-CATS 139 and any recommended practice contained in these documents which the Director may have incorporated as a standard.
- (3) Compliance with the said regulations and standards, for the purposes of issuing or renewal of a licence shall be determined by means of audit procedures and inspections, by the Authority, at various times, as determined by the Director, during the preceding licence period or before the issuing of a new licence.
- (4) The Authority shall levy fees from heliport licence holders, upon renewal or issuing of a heliport licence, in accordance with the tariffs as published in Part 187.
- (5) All heliports irrespective of their location shall be licensed in accordance with this subpart.

Heliport design requirements

- **139.03.2** (1) An applicant for the issuing of a heliport licence shall ensure that the heliport is provided with
 - (a) physical characteristics;
 - (b) obstacle limitation surface;
 - (c) visual aids for -
 - (i) navigation;
 - (ii) denoting obstacles; and
 - (iii) denoting the restricted area;
 - (d) equipment and installations; and
 - (e) an airspace classification referred to in Part 172,

appropriate to the characteristics of the helicopters is intends to serve, the lowest meteorological minima for each touchdown area, and the ambient light conditions during the operation of helicopters.

(2) The physical characteristics, obstacle limitation surfaces, visual aids, and equipment and installations provided at the heliport shall comply with the appropriate heliport design standards as prescribed in Document SA-CATS 139.

Operations manual

139.03.3 An applicant for the issuing of a heliport licence shall provide the Director with an operations manual which shall contain –

- (a) a statement by the accountable manager and compliance officer confirming that the operations manual and any included manuals define the organisation of the applicant and demonstrate the procedures and methods for ensuring that the provisions of the regulations in this part will be complied with at all times;
- (b) particulars of the personnel referred to in regulation 139.03.5(1);
- (c) organisational chart showing lines of responsibility of the personnel referred to in regulation 139.03.5(1);
- (d) the limitations on the use of the heliport referred to in regulation 139.01.3 or any other limitations the Director may deem necessary;
- (e) a description of the characteristics of and the infrastructure available at the heliport, which, taking into consideration the limitations referred to in paragraph (d), comply with the heliport design requirements referred to in regulation 139.03.2;
- (f) the heliport emergency management system referred to in regulation 139.03.6;
- (g) a description of the heliport's rescue and fire fighting capability which, taking into consideration the limitations referred to in paragraph (d), complies with the requirements prescribed in regulation 139.03.7;
- (h) the heliport environment management programme referred to in regulation 139.03.8;
- (i) the procedures for the notification of heliport data and information referred to in regulation 139.03.9;
- (j) the quality assurance system referred to in regulation 139.03.4;
- (k) a description of the security measures taken at the heliport to comply with the provisions of the Act;
- (I) the procedures to control, amend and distribute the operations manual; and
- (m) where applicable, the intended air traffic services and the approach and airspace categories.

Quality assurance system

- **139.03.4** (1) The applicant shall establish a quality assurance system containing an aviation safety programme, for the control and supervision of the operation and maintenance of the heliport and its services and facilities in accordance with the regulations in this subpart.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 139.

Personnel requirements

- **139.03.5** (1) The applicant shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - (i) Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect or such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected:
 - (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
 - (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
 - (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting the aviation safety programme; and
 - (c) adequate personnel, including a heliport manager, ATS personnel, to operate and sufficient rescue and fire fighting personnel maintain the heliport and its services and facilities according to the requirements prescribed in this subpart.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in operating and maintaining the heliport and its services and facilities.

Establishment of heliport emergency management system

- **139.03.6** (1) The applicant shall establish a heliport emergency management system designed to minimise the possibility and extent of personal injury and property damage on, or in the vicinity of, the heliport.
- (2) The heliport emergency management system referred to in sub-regulation (1) shall
 - (a) provide for all types of emergencies likely to take place on, or in the vicinity of, the heliport; and
 - (b) include -
 - (i) an index depicting all aspects contained in the system;
 - (ii) the types of emergencies planned for;
 - (iii) call out procedures for prompt response to emergencies planned for;
 - (iv) the persons involved in executing the allocated tasks;
 - (v) sufficient detail to provide adequate guidance to each person responsible for executing such system;
 - (vi) provision for a fully equipped emergency operations centre and command post for each type of emergency which may be encountered;
 - (vii) a description of all available rescue and medical equipment and the location of such equipment;
 - (viii) information on the particulars of personnel and persons to be contacted in the case of a particular emergency; and
 - (ix) a grid map of the heliport indicating available water resources and other landmarks of significance;
 - (x) a gridmap indicating the heliport and its surrounding up to a radius of 10 kilometer indicating the location of hospitals, clinics and road layout.
- (3) The applicant shall
 - (a) coordinate the proposed emergency management system with all personnel and persons who have allocated responsibilities in terms of the system; and
 - (b) to the extent practicable, provide for participation of all personnel and persons referred to in paragraph (a), in the establishment of the system.

Heliport rescue and fire fighting

- **139.03.7** (1) The applicant shall ensure that the heliport is provided with a rescue and fire fighting service, capable to provide the required level of protection necessary for maintaining the minimum level of protection required for the appropriate category of heliport as prescribed in Document SA-CATS 139.
- (2) The rescue and fire fighting category of the heliport shall be determined as prescribed in Document SA-CATS 139.
- (3) Personnel training standards shall be the same as indicated in regulation 139.02.9 with the emphasis on rotor-wing aircraft.

- (4) The holder of the licence may deviate from any requirement prescribed in this subpart to the extent required to attend to an emergency arising from any aviation accident or incident which occurs on, or within a radius of 10 kilometres from, the heliport.
- (5) A deviation in terms of sub-regulation (4) shall only be permitted
 - (a) for the period during which the emergency exists; and
 - (b) for the sole purpose of protecting life or property.
- (6) The holder of the licence shall ensure that the remainder of the rescue and fire fighting personnel and equipment will be able to attend to any possible aviation accident or incident which may occur as a result of the emergency referred to in sub-regulation (4) until assistance is obtained from other participants in the heliport emergency management system.
- (7) The holder of the licence who deviates in terms of sub-regulation (4) from any requirement prescribed in this subpart, shall
 - (a) notify the Director immediately of the nature of the emergency and the extent of the deviation; and
 - (b) submit a comprehensive report to the Director within 14 days from the date on which the emergency arose.

Establishment of heliport environment management programme

- **139.03.8** (1) The applicant shall, in the area within its authority and where any bird and wildlife presents or is likely to present a hazard to helicopters operating to or from the heliport, establish a heliport environment management programme to minimise the effects of such hazard or potential hazard, taking due cognisance of the provisions of the Environment Conservation Act, 1989 (Act No. 73 of 1989), and the regulations made thereunder.
- (2) The heliport operator shall ensure that an environmental management meeting is conducted with intervals not exceeding three months, and
 - (a) during such meetings, minutes must be kept and should clearly indicate all identified environmental issues that may affect the operations;
 - (b) the meeting must address all environmental issues within the boundaries of the heliport and in the immediate vicinity up to a radius of 10 kilometer that might affect the heliport operation negatively; and
 - (c) the mitigating measures to rectify all identified environmental issues must be recorded for audit purposes. This includes communication with external parties.

Notification of heliport data and information

- **139.03.9** (1) An applicant for the issuing of a heliport licence shall establish a procedure to notify the ATSU concerned and the Director
 - (a) of the heliport data and information;
 - (b) of any limitation on the use of the heliport contemplated in regulation 139.01.3;

- (c) of compliance with regulation 139.03.7;
- (d) as soon as possible, of any change which may affect the use of the heliport; and
- (e) any other information required in terms of regulations in Part 175.
- (2) A notification contemplated in sub-regulation (1) shall be made in the appropriate prescribed form.

Application for licence or amendment thereof

139.03.10 An application for the issuing of a heliport licence, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the operations manual referred to in regulation 139.03.3;
 - (ii) the plans of the heliport;
 - (iii) written approval from the local government concerned;
 - (iv) an environmental impact report, if required in terms of the Environment Conservation Act, 1989 and including the provision of rescue and fire fighting service as contemplated in regulation 139.03.7;
 - (v) written approval from all interested Government institutions;
 - (vi) proof that the applicant is financially capable of operating the heliport;
 - (vii) particulars of non-compliance with, or deviations from -
 - (aa) the appropriate heliport design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
 - (viii) the appropriate fee as prescribed in Part 187.

Processing of application for licence or amendment thereof

139.03.11 (1) The Director shall, as soon as practicable after the receipt of an application for a heliport licence, or an amendment thereof, publish by notice in the *Gazette* the following particulars in respect of the application concerned:

- (a) The full name of the applicant;
- (b) full particulars of the location of the heliport; and
- (c) a reference to the date by which the representations referred to in sub-regulation (2) must be submitted to the Director.
- (2) Any person may, after the publication of the notice referred to in sub-regulation (1) address in writing representations to the Director against or in favour of the application concerned.

Adjudication of application for licence or amendment thereof

- **139.03.12** (1) The Director shall as soon as practicable consider an application referred to in regulation 139.03.11 together with all representations, information and other documents relating to such application which are received within the period specified in the notice published in terms of regulation 139.03.11.
- (2) The Director may grant the application if the Director is satisfied that
 - (a) the applicant complies with the requirements prescribed in regulations 139.03.2 to 139.03.10 inclusive; and
 - (b) granting the application will not jeopardise aviation safety.

Issuing of licence

- **139.03.13** (1) A heliport licence shall be issued on the appropriate prescribed form.
- (2) The licence shall specify -
 - (a) the category for which the heliport is licensed; and
 - (b) the restrictions, if any, relating to non-compliance with, or deviations from
 - (i) the appropriate heliport design, operation or equipment standards prescribed in this Part; and
 - (ii) the appropriate airspace classification requirements prescribed in Part 172.

Period of validity

- **139.03.14** (1) A heliport licence shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date on which the licence is issued or renewed.
- (2) The licence shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of a licence which expires, shall forthwith surrender the licence to the Director.
- (4) The holder of a licence which is suspended, shall forthwith produce the licence upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of a licence which is cancelled, shall, within 30 days from the date on which the licence is cancelled, surrender such licence to the Director.

Transferability

139.03.15 (1) Subject to the provisions of sub-regulation (2), a heliport licence shall not be transferable.

(2) A change in ownership of the holder of a licence shall be deemed to be a change of significance referred to in regulation 139.03.16.

Changes in quality assurance system

- **139.03.16** (1) If the holder of a heliport licence desires to make any change in the quality assurance system referred to in regulation 139.03.4, which is significant to the showing of compliance with the appropriate requirements prescribed in this part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 139.03.10 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to his, her or its operations manual, that the applicant will continue to comply with the provisions of regulations 139.03.2 to 139.03.10 inclusive, after the implementation of such approved change.

Renewal of licence

- **139.03.17** (1) An application for the renewal of a heliport licence shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the updated operations manual referred to in regulation 139.03.3, if required by the Director;
 - (ii) proof of adequate funding:
 - (iii) particulars of non-compliance with, or deviations from
 - (aa) the appropriate heliport design, operation or equipment standards prescribed in this Part; or
 - (bb) the appropriate airspace classification requirements prescribed in Part 172; and
 - (iv) the appropriate fee as prescribed in Part 187.
- (2) The holder of the licence shall at least 60 days immediately preceding the date on which such licence expires, apply for the renewal of such licence.

Licence of intent

- **139.03.18** (1) Where a particular area has been demarcated for the development of a heliport, the proposed holder of a heliport licence in respect of the heliport, may apply to the Director for the issuing of a licence of intent for such area.
- (2) An application for the issuing of a licence of intent shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) full particulars of the particular area demarcated for the development of the heliport, and the location thereof; and
 - (ii) the appropriate fee as prescribed in Part 187.
- (3) The provisions of regulations 139.03.11 and 139.03.12(1) shall apply with the necessary changes to the processing of an application for the issuing of a licence of intent.
- (4) The Director may grant the application if the Director is satisfied that the development of the heliport will not jeopardise aviation safety.
- (5) A licence of intent shall be issued on the appropriate prescribed form .
- (6) The licence of intent shall specify the conditions and the restrictions which the Director deems necessary in the interests of aviation safety.
- (7) A licence of intent shall
 - (a) not be transferable; and
 - (b) be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date on which the licence of intent is issued.

General duties of holder of licence

- 139.03.19 (1) The holder of a heliport licence must
 - (a) hold at least one complete and current copy of the approved manuals referred to in regulation 139.03.3, at the heliport;
 - (b) comply with all procedures detailed in such manuals;
 - (c) make each applicable part of such operations manual available to the personnel who require those parts to carry out their duties; and
 - (d) continue to comply with the appropriate requirements prescribed in this part.
- (2) The holder of the licence must ensure that
 - (a) the heliport is maintained in a serviceable condition;
 - (b) the heliport is kept free of unauthorised persons, vehicles or animals not under proper control, in compliance with the Act;
 - (c) all obstructions are marked as prescribed in Document SA-CATS 139;

- (d) the Director is informed of any alterations to or obstructions or workings on the heliport;
- (e) an apparatus to show the surface direction of the wind, is installed and functions satisfactorily;
- (f) the markings as prescribed in Document SA-CATS 139, are maintained in a conspicuous condition, readily visible to helicopters in the air or on the ground;
- (g) the accommodation and facilities offered to the public are available and in a serviceable condition;
- (h) all apparatus installed by such holder to promote safety in flight, is functioning efficiently;
- (i) unserviceable areas on the landing terrain are appropriately marked as prescribed in Document SA-CATS 139;
- (j) the Director is informed whenever a heliport becomes unserviceable through any cause or whenever any portion of the surface of the touch-down area deteriorates to such extent that the safety of a helicopter may thereby be endangered, and helicopter operations are limited to those portions of the heliport not rendered unsafe by those conditions;
- (k) such reports on the condition of the heliport as may be required from time to time by the Director, are submitted to the Director;
- (I) the particulars of a foreign operator's permit are obtained and verified, in the case where a foreign helicopter which is used by virtue of such foreign operator's permit issued in terms of section 26(1) of the International Air Services Act, 1993 (Act No. 60 of 1993), lands at the heliport;
- (m) an annual survey is carried out on the heliport for the purposes of the approval of let-down procedures by the Director;
- (n) for heliports category H 1 2 and 3, a full set of the Civil Aviation Regulations that contain the latest amendments is available at the heliport; and
- (o) for heliports category H 1, 2 and 3, that the respective departments/ sections have available a set of the ICAO annexes and documents relevant to their area of responsibility.
- (3) The holder of the licence must
 - (a) furnish the Director with the heliport financial data and the heliport traffic statistics as prescribed in Document SA-CATS 139;

- (b) in the case of a heliport which serves helicopters used in international public air transport operations, establish a facilitation committee and compile a facilitation plan in accordance with the requirements and standards as prescribed in Document SA-CATS 139;
- (c) be responsible for the monitoring of helicopter noise on and in the vicinity of a heliport, and the reporting of violations to the Director, in accordance with the requirements and standards as prescribed in Document SA-CATS 139; and
- (d) when the ATSU at the aerodrome is not in operation, be responsible for the maintenance of flying discipline on, and in the vicinity of, such heliport.
- (4) The holder of the heliport licence is accountable for the implementation of aeronautical studies, inclusive of technical analysis, risk assessment and proposed risk mitigation for any contemplated deviation of Subpart 1 and Subpart 3 of Part 139 of the Regulations and the resultant outcome of such studies must be presented to the Director.

Works on heliport

- **139.03.20** (1) The holder of a heliport licence shall establish procedures and take precautions to ensure that any works carried out on the heliport, do not endanger any helicopter operations.
- (2) The procedures to be established and precautions to be taken in terms of sub-regulation (1), shall be established and taken in accordance with the requirements and standards as prescribed in Document SA-CATS 139.

Maintenance of heliport emergency management system

139.03.21 The holder of a heliport licence shall –

- (a) establish procedures to ensure that all participants to the effectiveness of the heliport emergency management system (HEMS) with allocated duties or responsibilities, are familiar with, and are properly trained for, their assignments and shall
 - (i) submit such HEMS to the Authority for approval;
 - (ii) provide a copy of the approved HEMS to the South African Search and Rescue (SASAR) coordination center in accordance with the South African Maritime Search and Rescue Act, 2002 (Act No. 44 of 2002);
 - (iii) provide a copy of the approved AEMS to the Provincial Disaster Management center in accordance with the Disaster Management Act, 2002 (Act No. 57 of 2002);
- (b) test the effectiveness of such heliport emergency management system by
 - (i) undertaking a full-scale heliport emergency exercise at intervals not exceeding two years;

- (ii) arranging special emergency exercises in the intervening year to correct any deficiencies identified during the full-scale heliport emergency exercise;
- (iii) conducting a table top exercise in intervals not exceeding three months to verify the roleplayers, contact detail and other vital information required to ensure that the HEMS is up to date.
- (c) submit a comprehensive written report to the Director within 14 days from the date on which
 - (i) a full-scale heliport emergency exercise referred to in paragraph (b)(i); or
 - (ii) special emergency exercise referred to in paragraph (b)(ii), has been undertaken or arranged; and
- (d) review such heliport emergency management system for effectiveness after each of the exercises referred to in paragraph (b), as well as after an actual emergency, to address any deficiencies identified and to adapt such system for the enhancement of its efficiency.

Maintenance of heliport environment management programme

139.03.22 The holder of a heliport licence shall –

- (a) maintain the heliport environment management programme referred to in regulation 139.03.8;
- (b) operate the heliport in accordance with the provisions of the Environment Conservation Act, 1989, and the regulations made thereunder, together with the recommendations and requirements prescribed in any relevant Specifications or Codes of Practice published under the Standards Act, 1993 (Act No. 29 of 1993); and
- (c) comply with the provisions of regulation 139.03.8.

Heliport inspection programme

139.03.23 The holder of a heliport licence shall establish and maintain a heliport inspection programme, including –

- (a) procedures to ensure that competent heliport personnel execute the programme effectively; and
- (b) a reporting system to ensure prompt correction of unsafe heliport conditions noted during any inspection,

to ensure compliance with the regulations in this subpart.

Demarcation of restricted area

139.03.24 (1) The holder of a heliport licence shall, on the heliport, demarcate a restricted area and indicate its boundaries by means of –

- (a) markings on the surface of such heliport;
- (b) fences or obstructions or notices erected along the boundaries of such restricted area: or
- (c) a combination of such markings, fences, obstructions or notices.
- (2) Subject to the provisions of sub-regulation (1) relating to the manner in which such boundary shall be indicated, the holder of the licence may alter any boundary or any portion of a boundary of the restricted area.

Control of entry into restricted area

- **139.03.25** (1) The holder of a heliport licence shall exercise control over entry into a restricted area.
- (2) The control referred to in sub-regulation (1) shall be exercised according to the procedures and criteria approved by such holder.
- (3) An authorised officer, inspector or authorised person may
 - (a) prohibit any person from entering a restricted area;
 - (b) order any person to leave a restricted area immediately, whether such person has been granted permission to be within a restricted area or not.

Safety measures against fire

- **139.03.26** (1) The holder of a heliport licence shall establish preventative measures against possible fires on the heliport and identify a person or group or persons to maintain a fire prevention programme for the heliport and heliport buildings.
- (2) If the heliport has no fire brigade service designated in terms of the Fire Brigade Services Act, 1987 (Act No. 99 of 1987), the holder of the licence shall arrange with the local government concerned to maintain a fire prevention programme for the heliport and to advise such holder of any dangerous conditions for rectification.
- (3) The holder of the licence shall ensure that no unsafe practice is performed on the heliport or within its parameters.
- (4) If unsafe practices have to be performed during any day-to-day maintenance of, or on, the heliport, the holder of the licence shall alert the rescue and fire fighting service concerned to be on standby for the duration of such practices.

Access of ground vehicles to heliport movement area

- **139.03.27** The holder of a heliport licence shall
 - (a) limit access to the heliport manoeuvring area of those ground vehicles which are necessary for heliport and helicopter operations;

- (b) if an ATSU is in operation at the heliport, provide adequate procedures for the safe and orderly access to, and operation in the heliport manoeuvring area of ground vehicles, in order to ensure that each ground vehicle operating in the heliport manoeuvring area is controlled by
 - (i) two-way radio communication between the vehicle and the ATSU;
 - (ii) if the vehicle has no radio, an accompanying vehicle with two-way radio communication with the ATSU; or
 - (iii) if it is not practical to have two-way radio communication or and escort vehicle, adequate measures including signs, signals or guards for controlling the vehicle;
- (c) if an ATSU is not in operation at the heliport, provide adequate measures to ensure that ground vehicles operating in the heliport movement area are controlled by the signs, pre-arranged signals or standards as prescribed in Document SA-CATS 139; and
- (d) ensure that each employee, tenant or contractor who operates a ground vehicle on any portion of the heliport which has access to the heliport movement area is familiar with, and complies with, the rules and procedures for the operation of ground vehicles as prescribed in Document SA-CATS 139.

Protection of navigation aids

139.03.28 The holder of a heliport licence shall –

- (a) prevent any construction of facilities on the heliport which may adversely affect the operation of any electronic or visual navigation aid or ATS facility on such heliport;
- (b) prevent, as far as it is within the authority of the such holder, any interruption of visual or electronic signals of navigation aids; and
- (c) liaise with the local government concerned and the Director with regard to any structure higher than the obstacle limitation surfaces on or in the vicinity of the heliport.

Heliport abandoned or not maintained

- **139.03.29** (1) In order that adequate warning may be given to the users of a heliport, the holder of a heliport licence shall give the Director at least 60 days written notice of its intention to discontinue the maintenance of the heliport or to abandon the heliport.
- (2) If, after the expiry of the period of notice referred to in sub-regulation (1), a heliport is abandoned or is not being maintained in accordance with the conditions of the licence, the holder of the licence shall remove, obliterate or modify all heliport markings as the Director may direct.
- (3) On completion of the task referred to in sub-regulation (2), the holder shall surrender the licence to the Director.

SUBPART 4: NON-LICENSED HELICOPTER SITES

Approval and operation of non-licensed helicopter sites

- **139.04.1** (1) No PIC of a helicopter shall land or take off from any place unless the place is so situated to permit the helicopter, in the event of an emergency arising during such landing or take-off, to land without undue hazard to persons or property on the surface.
- (2) No PIC of a helicopter shall land on, or take-off from, any building, structure or place situated within 100 meters of any other building or structure, in the area of jurisdiction of a local government, unless such building, structure or place has been approved for the purpose by the Director: Provided that this restriction shall not apply
 - (a) to a helicopter landing on, or taking off from a building, structure or place within an industrial area, a commercial warehouse area or open farm land which is suitable for such purposes and in respect of which helicopter the PIC is the holder of a valid CPL or ATPL (helicopter) or, in the case of the holder of a PPL (helicopter), with the written permission of the Director, unless specifically prohibited by the local authority;
 - (b) to a helicopter engaged in an air ambulance operation referred to in Part 138 (Air Ambulance Operations) a fire service referred to in this Part, or undertaking of a flight for the exercising of any power in terms of any law.
- (3) A local authority may after consultation with the Director, extend the scope of the provisions of sub-regulation (2)(a) to include other places in its area of jurisdiction.
- (4) The Director may, in the interest of aviation safety, impose conditions or institute restrictions as to the use of any building, structure or place for the landing or take-off of helicopters, or require special flight procedures to be adopted at, or special routes to be followed to or from, such building, structure or place by helicopters, and the Director may impose different conditions, institute different restrictions require different special flight procedures to be adopted in respect of different buildings, structures or places.
- (5) Nothing in this regulation shall be construed as conferring any right to land at any building, structure or place against the wishes of the owner of, or any other person who has an interest in, the building, structure or place or as prejudicing the rights or remedies of any person in respect of an injury to persons or property caused by the helicopter or its occupants.

PART 140: SAFETY MANAGEMENT SYSTEM

List of regulations

- 140.01.1 Applicability
- 140.01.2 Establishment of safety management system

140.01.3 Requirements for safety management system

Applicability

140.01.1 This Part applies to the holder of –

- (a) a category 4 or higher aerodrome licence issued in terms of Part 139, where commercial activities take place;
- (b) an ATO approval issued in terms of Part 141;
- (c) an AMO approval issued in terms of Part 145;
- (d) a manufacturing organisation approval issued in terms of Part 148;
- (e) an ATSU approval issued in terms of Part 172;
- (f) a design organisation approval issued in terms of Part 147;
- (g) an operating certificate issued in terms of Parts 127;
- (h) procedure design organisation approval issued in terms of Part 173; and
- (i) an electronic services organisation approval issued in terms of Part 171.

Establishment of safety management system

140.01.2 (1) The holder of a category 4 or higher aerodrome licence where commercial activities take place, shall establish, implement, maintain and adhere to a SMS that is appropriate to the size, nature and complexity of the operations or activities authorized to be conducted in terms of the licence issued under regulation 139.02.1 and the hazards and risks related to the operations or activities.

- (2) The holder of
 - (a) a category 4 or higher aerodrome licence;
 - (b) an ATO approval;
 - (c) an aircraft maintenance organisation approval;
 - (d) a manufacturing organisation approval;
 - (e) an ATSU approval;
 - (f) a design organisation approval;
 - (g) an AOC issued in terms of Part 127;
 - (h) a procedure design organisation approval; and
 - (i) an electronic services organisation approval,

shall establish a SMS for the control and supervision of the services rendered or to be rendered by that organisation.

(3) The Director shall determine the acceptable level of safety for all the holders of approvals or operating certificates reflected in sub-regulation (1).

Requirements of safety management system

140.01.3 (1) The SMS shall include –

- (a) the identification of safety hazards;
- (b) remedial action necessary to maintain an acceptable level of safety
- (c) continuous monitoring and regular assessment of the safety level achieved;
- (d) continuous improvement to the overall level of safety;
- (e) a clear definition of the level of safety that the organisation intends to achieve;
- (f) proof by the organisation that adequate safety measures to maintain the required level of safety will be or have been instituted;
- (g) the components and elements referred to in Document SA-CATS 140.
- (2) The SMS shall clearly define lines of safety accountability throughout all the organisations and by operators referred to in regulation 140.01.1, including direct accountability for safety by senior management.
- (3) The minimum standards for a SMS that have to be complied with are prescribed in Document SA-CATS 140.
- (4) A SMS established in terms of regulation 140.01.2 shall be documented and after it has been approved by the Director, shall form part of an operations manual of the organisations and of operators referred to in regulation 140.01.1.

PART 141: AVIATION TRAINING ORGANISATIONS

List of regulations

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SUBPART 1: GENERAL

Applicability

141.01.1 (1) This Part applies to the approval and operation of organizations conducting –

- (a) aviation training;
- (b) temporary aviation training; and
- (c) aviation training conducted on behalf of a third party.
- (2) This Part does not apply in respect of
 - (a) training conducted for familiarisation purposes; and
 - (b) training or instruction conducted in the interests of aviation safety: Provided that such training or instruction is not conducted for the issuing, renewal, reissuing, validation or revalidation of any licence, certificate or rating in terms of the Regulations.

Designation of body or institution

141.01.2 (1) The Director may designate a body or institution to –

- (a) exercise control over the aviation training specified in the Regulations, and over the persons conducting such aviation training;
- (b) determine standards for such aviation training and for the training of such persons;
- (c) issue, confirm, suspend or withdraw certificates for the successful completion of such aviation training, and keep all books or documents regarding such aviation training; and
- (d) advise the Director on any matter connected with such aviation training or persons.
- (2) The designation referred to in sub-regulation (1) shall be made in writing and shall be published by the Director in the *Gazette* within 30 days from the date of such designation.
- (3) The powers and duties referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 141.

Display of aviation training organisation approval

141.01.3 The holder of an ATO approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

- **141.01.4** Any advertisement by an organisation indicating that it is an ATO, shall
 - (a) reflect the number of the ATO approval issued by the Director; and
 - (b) contain a reference to the aviation training for which such approval was issued.

Safety inspections and audits

- **141.01.5** (1) An applicant for the issuing of an ATO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of regulation 141.02.7 or regulation 141.03.2, as the case may be.
- (2) The holder of an ATO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Register of approvals

- **141.01.6** (1) The Director shall maintain a register of all ATO approvals issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;

- (d) particulars of the scope of the approval issued to the holder of the approval; and
- (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF AVIATION TRAINING ORGANISATION (STANDARD AVIATION ORGANISATION)

Requirements for approval

- **141.02.1** (1) No organisation shall conduct aviation training except under the authority of, and in accordance with the provisions of this Part.
- (2) The issuing of an approval for an ATO and the continued validity of the approval shall depend upon the ATO being in compliance with the requirements of this Subpart.

Training and procedures manual

- **141.02.2** (1) The ATO shall provide a training and procedures manual for the use and guidance of personnel concerned and such manual may be issued in separate parts and shall contain at least the following information:
 - (a) A general description of the scope of training authorised under the ATO's terms of approval.
 - (b) The contents of the training programmes offered, including the courses and equipment to be used.
 - (c) A description of the organisation's quality assurance system in accordance with regulation 141.02.3.
 - (d) A description of the organisation's facilities.
 - (e) The name, duties and qualifications of the person designated as responsible for compliance with the requirements of the approval in regulation 141.02.4 (1)(a).
 - (f) A description of the duties and qualifications of the personnel designated as responsible for planning, performing and supervising the training in regulation 141.02.04(1)(c).

- (g) A description of the procedures used to establish and maintain the competence of personnel as required by regulation 141.02.04 (2) and (3).
- (h) A description of the method used for the completion and retention of the training records required by regulation 141.02.14.
- (i) A description, when applicable, of additional training needed to comply with an operator's procedures and requirements.
- (j) A description of the selection, role and duties of the authorised personnel, as well as the applicable requirements established by the Director, if the Director has authorised an ATO to conduct the testing required for the issuing of a licence, rating, or qualification.
- (2) The ATO shall ensure that the training and procedures manual is amended as necessary to keep the information contained therein up to date.
- (3) Copies of all amendments to the training and procedures manual shall be furnished promptly to all organisations or persons to whom the manual has been issued.
- (4) The ATO must comply with the guidelines for the content of the training and procedures manual are prescribed in Document SA-CATS 141.
- (5) The contents of the training and procedures manual shall, with the necessary changes, include the elements prescribed in Document SA-CATS 141 as far as they are appropriate to the type of aviation training to be provided.
- (6) The Director may approve the addition or removal of elements of the training and procedures manual to meet the unique requirements of an ATO.

Quality assurance system

- **141.02.3** (1) The ATO shall establish a quality assurance system, acceptable to the Director which complies with all requirements as prescribed in Document SA-CATS 141.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 141.

Personnel requirements

- **141.02.4** (1) The ATO shall nominate engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable

requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:

- (i) Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
- (ii) full rights of consultation with any such person in respect of such compliance by him or her;
- (iii) powers to order cessation of any activity where such compliance is not effected;
- (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
- (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting airworthiness and aviation safety; and
- (c) adequate personnel to plan, conduct and supervise the standard aviation training covered by the application.
- (2) The ATO shall establish a procedure acceptable to the Director for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, conducting or supervising the aviation training covered by the application.
- (3) The ATO shall ensure that those personnel responsible for training or assessing students, have a combination of competence and experience adequate for the level of competence required by the Director for such training or assessment.
- (4) (a) The ATO shall ensure that all instructional personnel receive initial and recurrent training appropriate to their assigned tasks and responsibilities.
- (b) The training programme established by the ATO shall include training in knowledge and skills related to human performance.

Accommodation, facilities and equipment

- **141.02.5** (1) The ATO shall ensure that the facilities and working environment are appropriate for the aviation training to be performed and are acceptable to the Director.
- (2) The synthetic training devices shall be qualified according to requirements established by the Director and prescribed in Document SA-CATS 141.
- (3) The use of the synthetic training device shall be approved by the Director to ensure that it is appropriate and limited to the approved training.

Accreditation

141.02.6 An ATO shall obtain accreditation from a body or institution that may be designated by the Director in terms of regulation 141.01.2, for conducting the aviation training covered by the application.

Application for approval or amendment thereof

- **141.02.7** An organisation applying for an ATO approval to conduct aviation training, or an amendment thereof, shall
 - (a) follow the approval or amendment process prescribed in Document SA-CATS 141 for ATOs; and
 - (b) ensure that the application is accompanied by the appropriate fee as prescribed in Part 187

Issuing of approval

- **141.02.8** The Director shall issue an ATO approval to conduct standard aviation training, if the applicant complies with the requirements prescribed in regulations 141.02.2 and 141.02.6 inclusive.
- (2) The Director shall issue the approval on the appropriate prescribed form.
- (3) The approval shall contain at least the following:
 - (a) the organisation's name and location;
 - (b) the date of issue and period of validity, where applicable;
 - (c) the terms of approval; and
 - (d) the organisation's certificate number.

Scope of approval

141.02.9 An ATO approval shall specify the aviation training which the holder of the approval is entitled to conduct.

Period of validity

- **141.02.10** (1) An ATO approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) If the holder of an approval applies for the renewal of the approval at least 30 days prior to the expiry of the approval, then approval shall, notwithstanding sub-regulation (2), remain in force until the Director issues the renewal thereof.

- (4) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (5) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (6) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **141.02.11** (1) Subject to the provisions of sub-regulation (2), an ATO approval shall not be transferable.
- (2) A change in ownership of the holder of an approval to conduct aviation training shall be deemed to be a change of significance referred to in regulation 141.02.12.

Renewal of approval

- **141.02.12** (1) An application for the renewal of an ATO approval shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) be accompanied by -
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) the training and procedures manual referred to in regulation 141.02.2; and
 - (iii) proof of the accreditation referred to in regulation 141.02.6.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Duties of holder of approval

- 141.02.13 The holder of an ATO approval shall
 - (a) keep at least one complete and current copy of its training and procedures manual referred to in regulation 141.02.2, at each training facility specified in the training and procedures manual;
 - (b) comply with all procedures detailed in the training and procedures manual;
 - (c) make each applicable part of the training and procedures manual available to the personnel who require those parts to carry out their duties; and
 - (d) continue to comply with the appropriate requirements prescribed in this Part.

Documents and records

- 141.02.14 (1) The holder of an ATO approval shall
 - (a) retain detailed student records to show that all requirements of all the training presented under the organisation's approval have been met as approved by the Director:
 - (b) establish procedures to control the documents referred to in paragraph (a).
- (2) The procedures referred to in sub-regulation 1(b) shall be made to ensure that
 - (a) all documents are reviewed and authorised by the appropriate personnel before the issuing thereof;
 - (b) current issues of all relevant documents are available to those personnel involved in planning, conducting or supervising the specified aviation training undertaken by the holder of the approval;
 - (c) all obsolete documents are promptly removed from all points of issue or use; and
 - (d) changes to documents are reviewed and authorised by the appropriate personnel.
- (3) The holder of the approval shall establish procedures to identify, collect, index, store and maintain all records which may be necessary
 - (a) for the specified aviation training conducted by such holder;
 - (b) to determine compliance with the appropriate requirements prescribed in this Subpart.
- (4) The procedures referred to in sub-regulation (3) shall be made to ensure that
 - (a) a record is kept of each quality assurance review of the holder of the approval;
 - (b) a record is kept of each person who conducts the specified aviation training, including particulars of the competence assessments and experience of each such person;
 - (c) a record is kept of each student being trained or assessed by the holder of the approval, including particulars of enrolment, attendance, modules, instructor comments and any flight or similar practical sessions and assessments of each such student;
 - (d) all records are legible; and
 - (e) all records are kept for a period of at least five years calculated from the date of the last entry made in such records.
- (5) An ATO conducting training on behalf of a holder of an operating certificate shall ensure that all training documents utilized, reflect and are specific to the current operating procedures, quality assurance and safety programme of such holder.

Pilot training programmes

- **141.02.15** (1) The Director may approve a pilot training programme for a PPL, CPL or instrument rating that allows an alternative means of compliance with the experience requirements established by Part 61, provided that the aviation training organization demonstrates to the satisfaction of the Director that the training provides a level of competency at least equivalent to that provided by the minimum experience requirements for personnel not receiving such approved training.
- (2) If the Director has approved a pilot training programme for a multi-crew pilot licence, the aviation training organization shall demonstrate to the satisfaction of the Director that the training provides a level of competency in multi-crew operations at least equal to that met by holders of a CPL, instrument rating and type rating for a turbine_aeroplane certificated for operation with a minimum crew of at least two pilots.
- (3) If the Director approved the presentation of a pilot training programme for which a syllabus has not been prescribed by the Director, only the programme with the associated curriculum, modules, attendance requirements and reference material will be deemed to have been approved; and any notes or course material that may be compiled and distributed by the ATO to students or any other person or organisation, are at the discretion of and the liability of the distributing ATO.
- (4) If the Director establishes a criteria or a syllabus with associated requirements for any programme referred to in sub-regulation (3) above, the approval may mutatis mutandis be withdrawn or suspended by the Director until the requirements that may be prescribed are met.

Oversight

141.02.16 The Director shall maintain an effective oversight programme of the ATO to ensure continuing compliance with the approval requirements.

Evaluation and checking

141.02.17 If the Director authorises an aviation training organization to conduct the testing required for the issuing of a licence or rating, the testing shall be conducted by personnel authorised by the Director or designated by the ATO in accordance with the criteria approved by the Director.

SUBPART 3: APPROVAL OF ORGANISATION (TEMPORARY AVIATION TRAINING)

Requirements for approval

- **141.03.1** (1) No organisation shall conduct temporary aviation training except under the authority of, and in accordance with the provisions of, an ATO approval issued under this Subpart.
- (2) An ATO applying for an ATO approval to conduct temporary aviation training, shall
 - (a) engage, employ or contract adequate personnel to plan, conduct and supervise the temporary aviation training covered by the application;
 - (b) ensure that those personnel responsible for conducting the temporary aviation training, have a combination of competence and experience adequate for the level of competence required for such training;
 - (c) ensure that the facilities and resources are adequate to enable the personnel to conduct such temporary aviation training; and
 - (d) have documented procedures for conducting such temporary aviation training.

Application for approval

- **141.03.2** An application for the issuing of an ATO approval to conduct temporary aviation training, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) proof of compliance with the requirements prescribed in regulation 141.03.1.

Issuing of approval

- **141.03.3** (1) The Director shall issue an ATO approval to conduct temporary aviation training, if the applicant complies with the requirements prescribed in regulation 141.03.1.
- (2) The Director shall issue the approval on the appropriate prescribed form.

Scope of approval

141.03.4 An ATO approval issued in terms of this subpart shall specify the temporary aviation training which the holder of the approval is entitled to conduct.

Period of validity

- **141.03.5** (1) An ATO approval issued in terms of this subpart shall be valid for the period required to conduct the specified temporary aviation training.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.

- (3) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

141.03.6 An ATO approval issued in terms of this subpart, is not transferable.

Duties of holder of approval

- **141.03.7** (1) The holder of an ATO approval issued in terms of this subpart, shall
 - (a) continue to comply with the appropriate requirements prescribed in this Part;
 - (b) ensure that documents and records are kept as prescribed in regulation 141.02.1 and Document SA-CATS 141.

PART 145: AIRCRAFT MAINTENANCE ORGANISATIONS

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SUBPART 1: GENERAL

Applicability

- **145.01.1** (1) This Part applies to the approval and operation of organisations for the maintenance of aircraft and aircraft components.
- (2) An AMO located outside the Republic may be approved by the Director if
 - (a) the Director is satisfied that a need exists for such approval; and
 - (b) the AMO complies with the provisions of this part.

Requirement for approval

- **145.01.2** (1) No organisation shall perform maintenance on or release to service
 - (a) an aircraft used or intended to be used for flight operations; or
- (b) an aircraft component fitted or intended to be fitted to the aircraft, except under the authority of, and in accordance with the provisions of, an AMO approval with the appropriate rating issued under this Part.
- (2) No organisation other than the holder of an AMO approval with the appropriate rating issued under this Part, shall carry out
 - (a) the overhaul of an aircraft component:
 - (b) maintenance on an aircraft or aircraft component where the relevant airworthiness data require the use of jig which is
 - (i) approved or certified by the manufacturer; or
 - (ii) approved by the Director;
 - (c) maintenance on an aircraft component where the maintenance involves the disturbance of any part of the component which is supplied as a bench tested unit, except where –

- (i) the disturbance is for the replacement or adjustment of a part or parts normally replaceable or adjustable in service; and
- (ii) subsequent functioning of the part or parts disturbed can be proved without the use of test apparatus which is additional to the test apparatus used for normal functioning checks;
- (d) maintenance on an aircraft engine where the maintenance involves
 - (i) dismantling and assembly of a piston engine except where this is to obtain access to the piston or cylinder assembly;
 - (ii) dismantling and assembly of any main casing or main rotating assembly of a turbine engine, except where this is for replacement of a main casing or rotating assembly, whether comprising the whole or part of a rotating system, and the maintenance manual for the engine provides instruction for the replacement, and the removal from the engine is achieved solely by disconnecting the flanges of main casings; or
 - (iii) disturbance of reduction gear;
- (e) aircraft propeller balancing other than *in situ* dynamic propeller balancing in accordance with the aircraft manufacturer's instructions; and
- (f) maintenance on a rotorcraft where the maintenance involves the dismantling of any transmission gearbox, except where this is for the separation of casing to obtain access for the purpose of internal inspection in accordance with the rotorcraft manufacturer's instructions.
- (3) No organisation shall release to service an aircraft or aircraft component which has undergone the maintenance referred to in sub-regulation (2), except under the authority of, and in accordance with the provisions of, an AMO approval with the appropriate rating issued under this Part.
- (4) The provisions of sub-regulations (2) and (3) shall not apply in respect of any amateur-built aircraft, microlight aeroplane, gyroplane, airship, glider or free balloon, unless it is used in commercial operations.

Display of AMO approval

145.01.3 The holder of an AMO approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

- **145.01.4** Any advertisement by an organisation indicating that it is an AMO, shall
 - (a) reflect the number of the AMO approval issued by the Director; and
 - (b) contain a reference to the category under which and the aircraft or aircraft component for which the organisation is rated.

Safety inspections and audits

- **145.01.5** (1) An applicant for the issuing of an AMO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of an AMO approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Categories of ratings

145.01.6 The categories of ratings for an AMO approval are –

- (a) Category A ratings and Category B ratings for all types of aircraft, either singly or in the classes as prescribed in Document SA-CATS 145;
- (b) Category B ratings for rotorcraft only, excluding the engine or engines, either singly or in the classes as prescribed in Document SA-CATS 145;
- (c) Category C ratings for all types of engines, excluding engines to be installed in rotorcraft, and Category D ratings for all types of engines, either singly or in the classed as prescribed in Document SA-CATS 145:
- (d) Category E ratings for all types of rotorcraft, either singly or in the classes as prescribed in Document SA-CATS 145;
- (e) Category W ratings for all types of
 - (i) electrical installations in all types of aircraft, excluding radio apparatus installations, either singly or in the classes as prescribed in Document SA-CATS 145;
 - (ii) instruments installations in all types of aircraft, either singly or in the classes as prescribed in Document SA-CATS 145; and
 - (iii) radio apparatus installations in all types of aircraft, either singly or in the classes as prescribed in Document SA-CATS 145; and
- (f) Category X ratings for aircraft equipment, instruments, components, accessories, auxiliaries or parts, either singly or in the classes as prescribed in Document SA-CATS 145.

Privileges of approved AMO

145.01.7 (1) The holder of an AMO approval with the appropriate rating shall ensure that the privileges of such rating are not exercised unless the AMO has the necessary facilities, current technical data, tools, equipment, materials and competent personnel to perform the work in accordance with all current requirements regarding the maintenance and airworthiness of the particular type of aircraft, airframe, engine, aircraft component or other equipment.

- (2) Notwithstanding anything to the contrary contained in the Regulations, the holder of an approval with the appropriate rating may, in circumstances where
 - (a) no appropriately licensed and rated AME; of
- (b) no other approved and appropriately rated AMO, is available, rectify any defect in a similar type of aircraft for which the approval is rated.
- (3) Where a defect referred to in sub-regulation (2) is rectified, the holder of the approval shall notify the Director in writing, within 48 hours from the moment the defect is rectified, of the reasons for, and nature of, such rectification.
- (4) Where a defect in an aircraft which is not similar to the type of aircraft for which the approval is rated, is rectified, the holder of such approval shall obtain the prior written permission from the Director to effect such rectification.

Limitations on approved AMO

- **145.01.8** (1) The holder of an AMO approval may only maintain an aircraft or aircraft component for which it is approved.
- (2) The holder of an approval shall not maintain an aircraft or aircraft component for which it is approved unless such holder has available all the facilities, equipment, tooling, airworthiness data and certifying personnel necessary to maintain the aircraft or aircraft component in accordance with its manual of procedure and the requirements prescribed in this part.

Register of approvals

- **145.01.9** (1) The Director shall maintain a register of all AMO approvals issued in terms of the regulations in this part.
- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the rating issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued by the Director.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Designation of airworthiness representatives

- **145.01.10** (1) The Director may, designate an airworthiness representative to perform the functions as prescribed in Document SA-CATS 145.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 145.
- (3) The Director shall sign and issue to each designated airworthiness representative a document which shall state the full name of such airworthiness representative and contain a statement that
 - (a) such airworthiness representative has been designated in terms of sub-regulation (1); and
 - (b) such airworthiness representative is empowered to perform the functions referred to in sub-regulation (1).

Training and checking

- **145.01.11** (1) The holder of an aircraft maintenance approval shall establish and maintain a training programme for aircraft maintenance personnel in his or her employ.
- (2) The approval holder shall ensure that aircraft maintenance personnel
 - (a) receive or has received type- or model-specific training in respect of the aircraft or aircraft components for which the organisation has received maintenance approval; and
 - (b) receive periodically recurrent training with specific attention to new technologies and maintenance techniques,

as prescribed in Document SA-CATS 145.

- (3) The training programme, contemplated in sub-regulation (1), shall be part of the organisation's manual of procedure.
- (4) Initial and recurrent training may be provided only by the holder of an ATO approval issued in terms of Part 141, or by or on behalf of the original equipment manufacturer.

SUBPART 2: APPROVAL OF AIRCRAFT MAINTENANCE ORGANISATION

Manual of procedure

- **145.02.1** (1) An applicant for an AMO approval shall provide the Director with its manual of procedure which
 - (a) complies with the requirements prescribed in this Subpart; and
 - (b) contains the information as prescribed in Document SA-CATS 145.
- (2) Subject to sub-regulations (5) and (6), the holder of an AMO approval must ensure that the details in its manual of procedure provide a current description of the organisation.

- (3) The holder of an approval must
 - (a) ensure that each amendment to its manual of procedure meets the applicable requirements of this Part and any other relevant Part; and
 - (b) comply with the amendment procedures contained in its manual of procedures.
- (4) The holder of an approval must provide the Director with a copy of each amendment to its manual of procedure as soon as practicable after the amendment has been incorporated into the manual of procedure.
- (5) The holder of an approval who intends to change any of the following must apply to and obtain the prior approval of the Director:
 - (a) The accountable manager;
 - (b) the listed senior persons;
 - (c) the maintenance ratings;
 - (d) the procedures for changing the scope within a rating;
 - (e) the locations at which maintenance is carried out; or
 - (f) the procedure for authorising persons to certify maintenance.
- (6) The Director may specify conditions under which an approval holder must operate during or following any of the changes listed in sub-regulation (5), to ensure continued compliance with the requirements of this Part.
- (7) The holder of an approval must comply with all conditions specified as contemplated in sub-regulation (6).
- (8) If any change referred to in this regulation requires an amendment to the approval, the holder must forward the approval to the Director immediately after the amended approval has been issued.
- (9) The holder of an approval must make such amendments to its manual of procedure as the Director may consider necessary in the interests of aviation safety.

Quality assurance system

- **145.02.2** (1) The applicant shall establish a quality assurance system for the control and supervision of the maintenance of aircraft and aircraft components, covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 145.

Accommodation and facilities

- **145.02.3** The applicant shall satisfy the Director that
 - (a) it has adequate accommodation and facilities for all maintenance to be performed by the AMO, ensuring in particular, protection from the weather;

- (b) specialised work areas are segregated as appropriate to ensure that environmental and work area contamination does not occur;
- (c) appropriate office accommodation is provided for the administration of the maintenance performed and, in particular, for the administration of the organisation's quality, planning and technical records;
- (d) the working environment is appropriate for each task carried out and, in particular, complies with any special requirements specified in the applicable airworthiness data;
- (e) storage facilities are provided for parts, equipment, tools and materials required by the organisation;
- (f) the storage facilities referred to in paragraph (e) provide security for serviceable parts and segregation of serviceable from unserviceable parts, and control deterioration of, and damage to, stored items; and
- (g) it has established procedures to ensure compliance with the requirements prescribed in paragraphs (d), (e) and (f).

Personnel requirements

- **145.02.4** (1) An applicant for an aircraft maintenance approval shall, subject to sub-regulation (3), engage, employ or contract
 - (a) a senior person identified as the chief executive officer or the accountable manager who
 has the authority to ensure that all activities undertaken by the applicant shall be financed
 and carried out in accordance with the requirements prescribed by this Part;
 - (b) a senior person or group of senior persons who are responsible for ensuring that the applicant complies with the requirements of this Part; such nominated person or persons shall be accountable to the chief executive or accountable manager for the following functions –
 - (i) maintenance control;
 - (ii) personnel authorisations:
 - (iii) internal quality assurance; and
 - (c) sufficient personnel to plan, perform, supervise, inspect and certify the maintenance activities listed in the applicant's manual of procedure.
- (2) The applicant's senior personnel contemplated in paragraphs (a) and (b) of sub-regulation (1) shall meet the minimum requirements as prescribed in Document SA-CATS 145.
- (3) An applicant shall not engage, employ or contract a senior person as accountable manager without prior approval of the Director.
- (4) The applicant shall
 - (a) establish a procedure to initially assess, and a procedure for maintaining, the competence
 of the personnel involved in planning, performing, supervising, inspecting or certifying the
 maintenance activities performed by the applicant; and
 - (b) provide such personnel with written evidence of the scope of their authorisation.
- (5) The holder of an approval shall ensure that the personnel involved in planning, performing, supervising, inspecting, or certifying maintenance activities of the approval holder are engaged, employed, contracted by only one organisation.

- (6) The holder of an approval shall state in its Manual of Procedure a list of its personnel who are responsible for certifying maintenance and such list shall contain, at least, the following information:
 - (a) The full names of the certifying personnel;
 - (b) The company authorisation number or identification stamp; and
 - (c) The licence number issued by the Director.

Equipment, tools and material

145.02.5 The applicant shall satisfy the Director that it has –

- (a) the equipment, tools and material necessary to perform adequately the approved scope of work as required by the applicable airworthiness data, its manual of procedure and the regulations in this Part; and
- (b) established a procedure to control and, where necessary, calibrate tools and other equipment at a frequency and to a standard to ensure serviceability, accuracy and traceability.

Application for approval or amendment thereof

145.02.6 An application for the issuing of an AMO approval, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate from as prescribed by the Director; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 145.02.1.

Issuing of approval

- **145.02.7** (1) An applicant is entitled to an AMO approval if the Director is satisfied that
 - (a) the applicant meets the requirements prescribed in Part 145 as applicable and the applicant has compiled a statement of compliance which is accepted by the Director;
 - (b) the applicant's senior person or persons required by this Part
 - (i) are fit and competent persons; and
 - (ii) have never held a senior position in the previous five years in any AMO where the approval thereof was cancelled by the Director or the Minister as a result of negligence of such person; and
 - (c) the granting of the approval is not contrary to the interests of aviation safety.

Privileges

- **145.02.8** (1)(a) The privileges of an AMO with a Category A rating approval shall be limited to aircraft for which the approval is rated and shall be
 - (i) to release to service an aircraft, excluding its engine or engines;
 - (ii) to certify in the manner prescribed in the Regulations
 - (aa) work which the maintenance schedule relating to an aircraft authorises the holder of the approval to certify;
 - (bb) the assembly of an aircraft and any adjustment or minor modification of an aircraft; and
 - (cc) the installation or replacement of completed subassemblies, equipment, instruments and minor components of an aircraft, excluding its engine or engines; and
 - (ii) to release to service an aircraft, excluding its engine or engines, for a test flight.
- (b) For the purpose of sub-regulation (1)(b)(iii), a completed subassembly comprises a unit built up of individual components to form a complete unit which may include a wing, aileron, landing gear shock strut, wheel, complete landing gear, tail plane, fin, rudder and elevator.
- (2) The privileges of an AMO approval with a Category B rating shall be limited to aircraft for which the approval is rated and shall be
 - (a) to certify in the manner prescribed in the Regulations
 - (i) any overhaul, repair or modification of an aircraft, excluding its engine or engines, except –
 - (aa) the overhaul, repair or modification of such item, equipment or apparatus which is to be certified by the holder of an approval with a Category X rating; and
 - (bb) the installation and testing of such instrument, electrical equipment or radio apparatus which is to be certified by the holder of an approval with a Category W rating; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed in Part 21, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, modification or overhaul which it will certify:
 - (b) in respect of rotorcraft for which the approval is rated under Category A, to release to service a rotorcraft, excluding its engine or engines; and
 - (c) in respect of rotorcraft for which the approval is rated under Category E, to release to service a rotorcraft, excluding its engine or engines.
- (3) The privileges of an AMO approval with a Category C rating shall be limited to engines for which the approval is rated and shall be
 - (a) to release to service an engine installed in an aeroplane;
 - (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to an aeroplane authorises the holder of the approval to certify;
 - (ii) the installation of an engine in an aeroplane;
 - (iii) any adjustment or minor modification of an aeroplane engine and the replacement of external components and of piston and cylinder assemblies;
 - (iv) the overhaul and testing of spark plugs; and

- (v) any installation and maintenance, other than the overhaul, major modification or major repair, of propellers and the reassembly of variable-pitch propellers which may have been dismantled for transport purposes; and
- (c) to release to service an aeroplane engine for a test flight.
- (4) The privileges of an AMO approval with a Category D rating shall be limited to engines for which the approval is rated and shall be
 - (a) to release to service an engine; and
 - (b) to certify in the manner prescribed in the Regulations
 - (i) any overhaul, repair or modification of an engine or its accessories, except the overhaul, repair or modification of the ignition equipment, other than the spark plugs, and of the propeller, starter and generator which is to be certified by the holder of an approval with a Category X rating; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed in Part 21, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, modification or overhaul which it will certify.
- (5) The privileges of an AMO approval with a Category E rating shall be limited to aircraft for which the approval is rated and shall be
 - (a) to release to service a rotorcraft;
 - (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to a rotorcraft authorises the holder of the approval to certify;
 - (ii) the assembly of a rotorcraft and any adjustment or minor modification of a rotorcraft;
 - (iii) the installation or replacement of completed subassemblies, equipment, instruments and minor components of a rotorcraft;
 - (iv) any adjustment or minor modification of a rotorcraft engine and the replacement of external components and of piston and cylinder assemblies;
 - (v) the overhaul and testing of spark plugs; and
 - (vi) any installation and maintenance, other than the overhaul, major modification or major repair, of rotors and the reassembly of rotors which may have been dismantled for transport purposes; and
 - (c) to release to service a rotorcraft for a test flight.
- (6) The privileges of an AMO approval with a Category W rating shall be limited to equipment for which the approval is rated and shall be
 - (a) to release to service the equipment; and
 - (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to the aircraft authorises the holder of the approval to certify;
 - (ii) any adjustment, maintenance or modification of such equipment; and
 - (iii) any installation of such equipment in aircraft and the replacement of components and parts of such equipment: Provided that no equipment shall be dismantled for the purpose of making internal replacements.

- (7) The privileges of an AMO approval with a Category X rating shall be limited to aircraft equipment, instruments, components, auxiliaries or parts for which the approval is rated and shall be
 - (a) to release to service the aircraft equipment, instruments, components, auxiliaries or parts; and
 - (b) to certify in the manner prescribed in the Regulations
 - (i) their overhaul, repair, testing and modification; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed Part 21, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, overhaul, test or modification which it will certify.

Period of validity

- **145.02.9** (1) An AMO approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **145.02.10** (1) Subject to the provisions of sub-regulation (2), an AMO approval, is not transferable.
- (2) A change in ownership of the holder of an approval, shall be deemed to be a change of significance referred to in regulation 145.02.12.

Renewal of approval

- **145.02.11** (1) An application for the renewal of an AMO approval, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by the appropriate fee as prescribed in Part 187.

(2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Changes in quality system

- **145.02.12** (1) If the holder of an AMO approval desires to make any change in the quality system referred to in regulation 145.02.2, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 145.02.6 shall apply with the necessary changes to an application for the approval of a change in the quality system.
- (3) An application for the approval of a change in the quality system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure, that it will continue to comply with the provisions of regulations 145.02.1 to 145.02.5 inclusive, after the implementation of such approved change.

Duties of holder of approval

145.02.13 (1) The holder of an AMO approval shall –

- (a) hold at least one complete and current copy of its manual of procedure referred to in regulation 145.02.1, at each workplace specified in the manual of procedure;
- (b) comply with all procedures detailed in the manual of procedure;
- (c) make each applicable part of the manual of procedure available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in this Part.
- (2) The holder of an approval shall ensure that
 - (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the AMO; and
 - (b) all personnel who are authorised to issue on behalf of the AMO certificates of release to service and certificates relating to the maintenance of an aircraft,

are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organisation's manual of procedure in accordance with regulation 43.03.1(1)(b).

Record of certifying personnel

- **145.02.14** (1)The holder of an AMO shall maintain a record of all certifying personnel, which record shall include particulars of the scope of their authorisation.
- (2) The holder of an approval shall provide its certifying personnel with evidence of the scope of their authorisation.

(3) The record referred to in sub-regulation (1) shall be retained by the holder of the approval for a period of five years from the date on which the certifying personnel member ceases to be authorised by such holder.

Maintenance records

- **145.02.15** (1) The holder of an AMO approval with a Category A rating shall keep adequate records of all maintenance performed by the AMO.
- (2) The records referred to in sub-regulation (1) shall
 - (a) indicate the name of each person who performed the work;
 - (b) indicate the name of each person who inspected the work; and
 - (c) be retained for at least five years from the date on which the aircraft or aircraft component to which the work relates, was released to service.
- (3) The holder of an approval shall provide a copy of each certificate of release to service to the operator of the aircraft, together with a copy of any specific airworthiness data used for repairs or modifications carried out.
- (4) The holder of an approval shall establish a procedure for recording maintenance details and for the retention of such maintenance records.

Reports on defects or non-airworthy conditions

- **145.02.16** (1) The holder of an AMO approval shall report to the Director any defect or condition of an aircraft or aircraft component which may hazard the aircraft, within 48 hours from the moment the defect or condition to which the report relates, has been identified.
- (2) The holder of an aircraft maintenance approval shall establish procedures for
 - (a) collecting, investigating, and analyzing information relating to defects in the aircraft or component maintained by the applicant and distributing that information to
 - (i) the applicable design organisation; and
 - (ii) the owner or operator of that aircraft or component; and
 - (b) providing defect incident information to the Director in accordance with Part 12.

Airworthiness data

- **145.02.17** (1) The holder of an AMO approval shall
 - (a) keep all airworthiness data necessary to support the maintenance work performed by the AMO: and
 - (b) make the airworthiness data available to all personnel who need access to such data to discharge their allocated responsibilities.

- (2) The airworthiness data referred to in sub-regulation (1) shall include all relevant data issued by
 - (a) the Director; and
 - (b) the holder of a type certificate issued
 - (i) in terms of Part 21; or
 - (ii) by an appropriate authority.
- (3) The Director may classify in Document SA-CATS 145, data issued by an appropriate authority or the holder of a type certificate as mandatory, in which case the holder of an approval shall keep such data.
- (4) The holder of an approval shall establish a procedure to control and amend the data referred to in sub-regulations (1), (2) and (3).
- (5) If the holder of an approval intends to produce its own airworthiness data, additional to the data referred to in sub-regulation (1), such holder shall establish a procedure for producing and controlling such additional data.

PART 147: DESIGN ORGANISATIONS FOR PRODUCTS, PARTS AND APPLIANCES

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SUBPART 1: GENERAL

Applicability

- **147.01.1** This Part applies to the approval and operation of design organisations which design
 - (a) products or changes thereto; and
 - (b) parts and appliances or changes thereto.

Display of design organisation approval

147.01.2 The holder of a design organisation approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested.

Advertisements

147.01.3 Any advertisement by an organisation indicating that it is a design organisation, shall reflect the number of the design organisation approval issued by the Director.

Safety inspections and audits

- **147.01.4** (1) An applicant for the issuing of a design organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and flight and ground tests which may be necessary to verify the validity of any application made in terms of regulation 147.02.6.
- (2) The holder of a design organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Register of approvals

- **147.01.5** (1) The Director shall maintain a register of all design organisation approvals issued in terms of these regulations .
- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the terms of the approval issued to the holder of the approval; and

- (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF DESIGN ORGANISATION

Requirement for approval

147.02.1 No organisation shall design any product, part and appliance or a change thereto, except under the authority of, and in accordance with the provisions of, a design organisation approval issued under this Subpart.

Manual of procedure

- **147.02.2** An applicant for the issuing of a design organisation approval shall provide the Director with its manual of procedure which shall
 - (a) comply with the requirements prescribed in this Subpart; and
 - (b) contain the information as prescribed in Document SA-CATS 147.

Design control system

- **147.02.3** (1) The applicant shall establish a design control system for the control and supervision of the design of products, parts and appliances or changes thereto, covered by the application.
- (2) The minimum standards for a design control system shall be as prescribed in Document SA-CATS 147.

Personnel requirements

- **147.02.4** (1) The applicant shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her;

- (iii) powers to order cessation of any activity where such compliance is not effected;
- (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
- (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting airworthiness and aviation safety; and
- (c) adequate personnel to plan, perform, supervise and inspect the design of products, parts and appliances or changes thereto, undertaken by the design organisation.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, performing, supervising or inspecting the design of products, parts and appliances or changes thereto, undertaken by the design organisation.
- (3) The applicant shall ensure that
 - (a) the personnel in all technical departments are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities: and
 - (b) there is full and efficient coordination between departments and within departments in respect of airworthiness matters.

Accommodation, facilities and equipment

147.02.5 The applicant shall ensure that the accommodation, facilities and equipment are adequate to enable the personnel to achieve the airworthiness objectives for the product, parts and appliances.

Application for approval or amendment thereof

147.02.6 An application for the issuing of a design organisation approval or an amendment thereof, shall be –

- (a) made in the prescribed form and manner; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187;
 - (ii) the manual of procedure referred to in regulation 147.02.2; and
 - (iii) the terms of approval requested to be issued under regulation 147.02.8, for which application is being made.

Issuing of approval

- **147.02.7** (1) Subject to the provisions of sub-regulation (2), the Director shall issue a design organisation approval to design products, parts and appliances or changes thereto, if the applicant complies with the requirements prescribed in regulations 147.02.2 to 147.02.5 inclusive.
- (2) The Director shall refuse to issue the approval if the application concerned is not appropriate for the purpose of assisting applicants for, or holders of, type certificates, supplemental type certificates, part design approvals, repair design approvals or ZA-TSO authorisations in demonstrating technical capability.
- (3) A design organisation approval shall be issued the appropriate prescribed form .

Terms of approval

147.02.8 The terms of approval shall -

- (a) be issued as part of a design organisation approval;
- (b) list the types of design work and the categories of products, parts and appliances or changes thereto, for which the approval is held; and
- (c) contain the functions and duties which the design organisation is approved to perform with regard to the airworthiness of products, parts and appliances.

Privileges

- **147.02.9** (1) Subject to the provisions of regulation 147.01.4, the Director may accept without further verification, any document submitted in terms of Part 21, by the holder of a design organisation approval to design products, parts and appliances or changes thereto, for the purpose of obtaining
 - (a) a type certificate or the approval of a major change to a type design:
 - (b) a supplemental type certificate; or
 - (c) a ZA-TSO authorisation.
- (2) The holder of a design organisation approval shall be entitled to, within its terms of approval
 - (a) classify design changes as "major" or "minor" under a procedure approved by the Director:
 - (b) obtain approval of minor design changes under modification procedures approved by the Director and issue corresponding information or instructions containing a statement that the technical content is approved;
 - (c) when a major change to a type design has been approved by the Director, issue corresponding information or instructions containing a statement that the technical content is approved;
 - (d) obtain approval of documentary changes to the MMEL and to the AFM under a procedure approved by the Director, and issue such changes containing a statement that the changes are approved; and
 - (e) issue information or instructions not associated with changes except for actions required under Part 21.

Period of validity

- **147.02.10** (1) A design organisation approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **147.02.11** (1) Subject to the provisions of sub-regulation (2), a design organisation approval shall not be transferable.
- (2) A change in ownership of the holder of an approval shall be deemed to be a change of significance referred to in regulation 147.02.12.

Changes in design control system

- **147.02.12** (1) If the holder of a design organisation approval desires to make any change in the design control system referred to in regulation 147.02.3, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, or to the airworthiness of the product, part or appliance, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 147.02.6 shall apply with the necessary changes to an application for the approval of a change in the design control system.
- (3) An application for the approval of a change in the design control system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure, that it will continue to comply with the provisions of regulations 147.02.2 to 147.02.5 inclusive, after the implementation of such approved change.

Changes in terms of approval

- **147.02.13** (1) If the holder of a design organisation approval desires to make any change in the terms of approval referred to in regulation 147.02.8, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 147.02.6 shall apply with the necessary changes to an application for the approval of a change in the terms of approval.
- (3) An application for the approval of a change in the terms of approval shall be granted by the Director if the applicant satisfies the Director that it complies with the appropriate requirements prescribed in this subpart.

Duties of holder of approval

147.02.14 The holder of a design organisation approval shall –

- (a) hold at least one complete and current copy of its manual of procedure referred to in regulation 147.02.2, at each work location specified in the manual of procedure;
- (b) comply with all procedures detailed in the manual of procedure;
- (c) make each applicable part of the manual of procedure available to the personnel who require those parts to carry out their duties;
- (d) continue to meet the appropriate requirements prescribed in this Part;
- determine that the design of products, parts and appliances or changes thereto, as the case may be, comply with the appropriate requirements prescribed in Part 21 and have no unsafe feature; and
- (f) submit to the Director statements and supporting documents which confirm compliance with the provisions of paragraph (e).

Renewal of approval

147.02.15 (1) An application for the renewal of a design organisation approval shall be –

- (a) made in the prescribed form and manner; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 147.02.2.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

PART 148: MANUFACTURING ORGANISATIONS

List of regulations

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SUBPART 1: GENERAL

Applicability

148.01.1 (1) This Part applies to the approval and operation of manufacturing organisations that –

- (a) manufacture specified products, parts or appliances;
- (b) apply specified processes to products, parts or appliances; or
- (c) carry out specified tests on products, parts or appliances.
- (2) This Part also prescribes rules governing the holders of such approvals for showing conformity of products, parts or appliances with the applicable approved data.

Eligibility

148.01.2 The Director shall approve an application for a manufacturing organisation approval if

- (a) he or she is satisfied that for a defined scope of work, such an approval is appropriate for the purpose of showing conformity with a specific design; and
- (b) the applicant -
 - (i) holds, or has applied for, an approval of such a design; or
 - (ii) has a suitable arrangement with a holder of, or an applicant for, an approval of such a design; that ensures satisfactory co-ordination between production and design.

Display of manufacturing organisation approval

148.01.3 The holder of a manufacturing organisation approval shall display the approval in a prominent place at such holder's principal place of business, generally accessible to the public, and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

148.01.4 Any advertisement by an organisation, indicating that it is a manufacturing organisation, shall reflect the number of the manufacturing organisation approval issued by the Director.

Safety Inspections and audits

- **148.01.5** (1) An applicant for a manufacturing organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits as may be necessary to verify the validity of any application made in terms of regulation 148.02.2.
- (2) The holder of a manufacturing organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.
- (3) Inspection and audit fees, as prescribed in Part 187, shall be payable in respect of the inspections referred to in sub-regulation (1), and for any inspection considered necessary by the Director in order to adjudicate on the suspension of an approval issued in terms of this Part.

Ratings

- **148.01.6** The ratings for a manufacturing organisation approval are
 - (a) an M rating, to manufacture specified products, parts or appliances;
 - (b) a P rating, to apply specified processes to products, parts or appliances; and
 - (c) a T rating, to carry out specified tests on products, parts or appliances.

Register of approvals

- **148.01.7** (1) The Director shall maintain a register of all manufacturing organisation approvals issued in terms of this Part.
- (2) The register shall contain the following particulars
 - (a) full names of the holder of the approval;
 - (b) postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the rating issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.

- (3) The particulars, referred to in sub-regulation (2), shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF MANUFACTURING ORGANISATION

Approval requirements

148.02.1 The applicant for a manufacturing organisation approval must show, on the basis of the information submitted in the manual of procedures, requested in terms of regulation 148.02.5, that he or she meets the following requirements:

(a) General:

The facilities, working conditions, equipment and tools, processes and associated materials, personnel numbers and competence, and general organisation have to be of such a nature as to ensure that manufacturing organisations are able to discharge the responsibilities in terms of regulation 148.02.13.

- (b) Data:
 - (i) The manufacturing organisation
 - (aa) is in receipt of all approved data from the Director and from the holder of, or an applicant for, the approval of the type design, as appropriate, to determine conformity with the applicable design data; and
 - (bb) has a procedure to ensure that approved data are correctly incorporated in its production data;
 - (ii) keeps above data up to date and has made it available to all personnel who need access to such data to perform their duties.
- (c) Organisation:
 - (i) A manager, accountable to the Director, has been nominated; with responsibility within the organisation to ensure that all production is performed to the required standards and that the production organisation is continuously in compliance with the data and procedures identified in the manual of procedures.
 - (ii) A manager or group of managers has been nominated to ensure that the organisation is in compliance with the requirements of this Subpart, and who has or have been identified together with the extent of his, her or their authority. In this respect, such person or persons must be directly responsible to the manager identified in sub-paragraph (i) of this paragraph.
 - (iii) Staff at all levels have been given appropriate authority to be able to discharge their allocated responsibilities with full and effective co-ordination within the production organisation in respect of airworthiness matters.
- (d) Certifying staff:
 - (i) Certifying staff is defined as those personnel who are authorised by the manufacturing organisation to sign the documents issued under the scope or

- terms of its approval. The knowledge, background (including other functions in the organisation), and experience of the certifying staff shall be appropriate to discharge their allocated responsibilities.
- (ii) The manufacturing organisation maintains a record of all certifying staff that shall include details of the scope of their authorisation.
- (iii) Certifying staff is provided with evidence of the scope of their authorisation.

Application

- **148.02.2** An application for the issuing, renewal or amendment of a manufacturing organisation approval shall:
 - (a) be made to the Director in the appropriate prescribed form and shall include
 - (i) an outline of the information required by regulation 148.02.5;
 - (ii) the terms of approval requested to be issued under regulation 148.02.9; and
 - (b) be accompanied by the appropriate fee as prescribed in Part 187.

Issuing of approval

- **148.02.3** (1) The Director shall issue a manufacturing organisation approval if the applicant complies with the requirements of regulation 148.02.1.
- (2) The approval with the relevant rating shall be issued on the appropriate prescribed form.

Quality system

- **148.02.4** (1) The manufacturing organisation shall show that it has established and can maintain a quality system, which has to be documented.
- (2) This quality system shall be such as to enable the organisation to ensure that
 - (a) each product, part or appliance produced by the organisation or by its partners, or supplied from or subcontracted to outside parties, conforms to the applicable design data and is in a condition for safe operation;
 - (b) the processing of products, parts or appliances is controlled and supervised to ensure conformation with the conditions of the approval; and
 - (c) the testing of products, parts or appliances is controlled and supervised to ensure conformation with the conditions of the approval; and thus may exercise the privileges set forth in regulation 148.02.12.
- (3) The quality system shall include, as applicable within the scope of approval, control procedures for those elements shown in document SA-CATS 148.

Manual of procedure

- **148.02.5** (1) An applicant for a manufacturing organisation approval shall provide the Director with his or her manual of procedure, which shall
 - (a) comply with the requirements prescribed in this Subpart:
 - (b) contain the information prescribed in Document SA-CATS 148; and

(c) be amended, as necessary to remain an up-to-date description of the organisation. Two copies of amendments shall be supplied to the Director.

Changes to the Organisation

- **148.02.6** (1) If the holder of a manufacturing organisation approval desires to make any change to the organisation, which is significant to the showing of compliance with the appropriate requirements prescribed in this Subpart, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 148.02.2 shall apply with the necessary changes to an application for the approval of a change to the organisation.
- (3) An approval of a change to the organisation shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure that he or she will continue to comply with the provisions of regulation 148.02.1 after the implementation of such approved change.

Changes in location

148.02.7 A change in the location of the manufacturing, processing or testing facilities of the approved manufacturing organisation shall be regarded as a change of significance to the organisation which shall, therefore, comply with the provisions of regulation 148.02.6.

Transferability

- **148.02.8** (1) Subject to the provisions of sub-regulation (2), a manufacturing organisation approval shall not be transferable.
- (2) A change in ownership of the holder of an approval shall be deemed to be a change of significance to the organisation, referred to in regulation 148.02.6.

Terms of approval

- **148.02.9** The terms of approval shall
 - (a) be issued as part of the manufacturing organisation approval:
 - (b) specify the rating(s) relevant for the activity of the organisation; and
 - (c) specify the products or the categories of parts and appliances to be manufactured, processed or tested.

Changes to the terms of approval

- **148.02.10** (1) Application for a change to the terms of approval –
- (a) shall be made in a manner acceptable to the Director, as prescribed in document SA-CATS 148; and
 - (b) be accompanied by the appropriate fee as prescribed in Part 187.
- (2) The applicant shall comply with the provisions of regulations 148.02.5 and 148.02.6.

Period of validity

148.02.11 (1) A manufacturing organisation approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.

- (2) The approval shall remain in force until
 - (a) the manufacturing organisation fails to demonstrate compliance with the applicable requirements of this Part; or
 - (b) it expires or is suspended by an authorised officer, inspector, or authorised person, or cancelled by the Director; or
 - (c) there is evidence that the manufacturing organisation cannot maintain satisfactory control of the manufacture, processing or testing of products, parts or appliances under the approval; or
 - (d) the manufacturing organisation no longer meets the requirements of regulation 148.02.1; or the approval certificate has been revoked.
- (2) The holder of an approval that is suspended shall forthwith produce the approval upon suspension thereof to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of an approval that is revoked shall, within thirty (30) days from the date on which the approval is revoked, surrender such approval to the Director.

Privileges

148.02.12 The holder of a manufacturing organisation approval may, within the terms of approval issued in accordance with regulation 148.02.9:

- (a) in the case of a complete aircraft and upon presentation of an aircraft statement of conformity in the prescribed format, obtain a certificate of airworthiness (standard or export) in accordance with Part 21 Subpart 8 without further showing;
- (b) in the case of any other Class I product and upon presentation of a statement of conformity in the format as prescribed in Document SA-CATS 148, obtain from the Director an authorised release certificate without further showing:
- (c) in the case of products, parts or appliances, other than a Class I product, issue authorised release certificates in the format as prescribed by the Director without further showing; and
- (d) carry out maintenance on a new aircraft produced by the organisation to the extent necessary to keep it in an airworthy condition, and that does not require an approval in terms of Part 145, and issue a certificate of release to service in respect of such maintenance in accordance with Part 43.

Duties of approval holders

148.02.13 The holder of a manufacturing organisation approval shall:

- (a) ensure that the manufacturing organisation's manual of procedure, furnished in accordance with regulation 148.02.5 and the documents to which it refers, are used as the basic working documents within the organisation;
- (b) maintain the manufacturing organisation in conformity with the data and procedures approved for the manufacturing organisation approval;
- (c) determine that -
 - (i) each completed aircraft conforms to the type design and is in condition for safe operation prior to submitting statements of conformity to the Director; or
 - (ii) other products, parts or appliances are complete and conform to the approved design data and are in condition for safe operation for the issuing of authorised release certificates to certify airworthiness or conformity, as applicable;
- (d) record all details of work carried out in a form acceptable to the Director;
- (e) report to the holder of the type certificate or design approval all cases where products, parts or appliances have been released by the manufacturing organisation and subsequently identified to have deviations from the applicable design data, and investigate with the holder of the type certificate or design approval to identify those deviations that may lead to an unsafe condition;
- (f) provide assistance to the holder of the type certificate or design approval in dealing with any continuing airworthiness actions that are related to the products, parts or appliances that have been produced;
- (g) institute an archiving system incorporating requirements to its partners, suppliers and subcontractors, ensuring conservation of the data used to justify conformity of the products, parts or appliances, to be held at the disposal of the Director and be retained in order to provide the information necessary to ensure the continuing airworthiness of the products, parts or appliances; and
- (h) where under the terms of approval, a certificate of release to service is to be issued, determine that each completed aircraft has been subjected to necessary maintenance and is in a condition for safe operation, prior to the issuing of the certificate.

Renewal of approval

148.02.14 An application for the renewal of a manufacturing organisation approval to manufacture products, part or appliance, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 148.02.5.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

PART 149: AVIATION RECREATION ORGANISATIONS

List of regulations

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SUBPART 1: GENERAL

Applicability

149.01.1 (1) This Part applies to the approval and operation of organisations whose members operate, for recreational purposes, –

- (a) microlight aeroplanes and powered paragliders;
- (b) gliders;
- (c) free balloons;
- (d) gyroplanes;
- (e) hang gliders and non-powered paragliders;
- (f) parachutes; or
- (g) non-certificated aircraft.
- (2) This Part does not apply to -

- (a) the holder of an air service licence issued in terms of the Air Services Licensing Act, 1990:
- (b) any person who wishes to operate an air service as defined in section 1 of the Air Services Licensing Act, 1990; or
- (c) any person exempted by the Director in terms of Part 11.

Designation of body or institution

149.01.2 (1) The Director may designate a body or institution to –

- (a) establish safety standards relating to aviation recreation;
- (b) exercise control over an aviation recreation organisation designated under the provisions of this Part;
- (c) determine standards for the operation or airworthiness of aircraft involved in aviation recreation;
- (d) issue special flight permits;
- (e) determine standards for the licensing of personnel involved in aviation recreation;
- (f) issue licences to such personnel; and
- (g) advise the Director on any matter connected with the operation or airworthiness of aircraft or the licensing of personnel involved in aviation recreation.
- (2) The designation referred to in sub-regulation (1) shall be made in writing and shall be published in the *Gazette* within 30 days from the date of such designation.
- (3) The powers and duties referred to in sub-regulation (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as prescribed in Document SA-CATS 149.

Display of aviation recreation organisation approval

149.01.3 The holder of an aviation recreation organisation approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

149.01.4 Any advertisement by an organisation indicating that it is an aviation recreation organisation, shall –

- (a) reflect the number of the aviation recreation organisation approval issued by the Director; and
- (b) contain a reference to the aviation recreation for which such approval was issued.

Safety inspections and audits

- **149.01.5** (1) An applicant for an aviation recreation organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of regulation 149.02.6.
- (2) The holder of an aviation recreation organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Register of approvals

- **149.01.6** (1) The Director shall maintain a register of all aviation recreation organisation approvals issued in terms of these regulations .
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the scope of the approval issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART2: APPROVAL OF AVIATION RECREATION ORGANISATION

Requirement of approval

149.02.1 No organisation shall undertake aviation recreation except under the authority of, and in accordance with the provisions of, an aviation recreation organisation approval issued under this Subpart.

Manual of procedure

- **149.02.2** An applicant for an aviation recreation organisation approval shall provide the Director with its manual of procedure which shall
 - (a) comply with the requirements prescribed in this Subpart; and
 - (b) contain the information as prescribed in Document SA-CATS 149.

Quality assurance system

- **149.02.3** (1) The applicant shall establish a quality assurance system for the control and supervision of the aviation covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 149.

Personnel requirements

- **149.02.4** (1) The applicant shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - (i) Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected;
 - (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
 - (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
 - (b) a competent person who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting airworthiness and aviation safety; and
 - (c) adequate personnel to carry out and supervise the aviation recreation covered by the application.
- (2) The applicant shall
 - (a) establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel authorised by the applicant to carry out and supervise the aviation recreation covered by the application; and
 - (b) provide the personnel referred to in paragraph (a) with written proof of the scope of their authorisation.

Resource requirements

149.02.5 The applicant shall ensure that the resources are adequate to enable the personnel to carry out and supervise the aviation recreation covered by the application.

Application for approval or amendment thereof

- **149.02.6** An application for the issuing of an aviation recreation organisation approval or an amendment thereof, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 149.02.2.

Issuing of approval

- **149.02.7** (1) The Director shall issue an aviation recreation organisation approval if the applicant complies with the requirements prescribed in regulations 149.02.2 to 149.02.5 inclusive.
- (2) The Director shall issue the approval on the appropriate prescribed form.

Scope of approval

- **149.02.8** An aviation recreation organisation approval shall specify
 - (a) the aviation recreation which the holder of the approval is entitled to undertake; and
 - (b) the procedures which the holder of the approval is authorised to establish and administer.

Period of validity

- **149.02.9** (1) An aviation recreation organisation approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which expires, shall forthwith surrender the approval of the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.

(5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **149.02.10** (1) Subject to the provisions of sub-regulation (2), an aviation recreation organisation approval shall not be transferable.
- (2) A change in ownership of the holder of an approval to undertake aviation recreation, shall be deemed to be a change of significance referred to in regulation 149.02.11.

Changes in quality assurance system

- **149.02.11** (1) If the holder of an aviation recreation organisation approval desires to make any change in the quality assurance system referred to in regulation 149.02.3, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 149.02.6 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure, that it will continue to comply with the provisions of regulations 149.02.2 to 149.02.5 inclusive, after the implementation of such approved change.

Renewal of approval

- **149.02.12** (1) An application for the renewal of an aviation recreation organisation approval shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 149.02.2.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Duties of holder of approval

149.02.13 The holder of an aviation recreation organisation approval shall –

- (a) hold at least one complete and current copy of its manual of procedure referred to in regulation 149.02.2, at each recreation facility specified in the manual of procedure;
- (b) comply with all procedures detailed in the manual of procedure;

- (c) make each applicable part of the manual of procedure available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in this Part.

Technical and regulatory data

- **149.02.14** (1) The holder of an aviation recreation organisation approval shall keep copies of all relevant equipment manuals, technical bulletins and instructions, legislation, and any other documents which may be necessary to establish procedures for the aviation recreation specified in its manual of procedure.
- (2) The holder of the approval shall establish procedures to control and amend the documents referred to in sub-regulation (1).
- (3) The procedures referred to in sub-regulation (2) shall ensure that
 - (a) all documents are reviewed and authorised before the issuing thereof;
 - (b) changes to documents are reviewed and authorised by the holder of the approval;
 - (c) the current version of each document can be identified to preclude the use of out of date editions:
 - (d) current issues of data and documents are held by those personnel within the aviation recreation organisation who require such data and documents to carry out their duties;
 and
 - (e) obsolete documents are promptly removed from circulation.

Records

- **149.02.15** (1) The holder of an aviation recreation organisation approval shall establish procedures to identify, collect, index, store, maintain and dispose of, the records which are necessary for the aviation recreation specified in its manual of procedure.
- (2) The procedures referred to in sub-regulation (1) shall ensure that
 - (a) a record is kept of each quality control review of the holder of the approval;
 - (b) all records are legible; and
 - (c) all records are kept for a period of at least five years calculated from the date of the last entry made in such records.

Operational and maintenance procedures

- **149.02.16** (1) The holder of an aviation recreation organisation approval which authorises operational and maintenance procedures to be established, shall establish operational and maintenance procedures for the aviation recreation specified in its manual of procedure.
- (2) The procedures referred to in sub-regulation (1) shall –

- (a) be relevant and not in conflict with the appropriate procedures prescribed in the Regulations; and
- (b) be administered to ensure that the requirements
 - (i) remain valid for their intended use; and
 - (ii) are reviewed on a regular basis.
- (3) The procedures referred to in sub-regulation (1) shall include details of
 - (a) the manner in which the holder selects launching, flying and landing sites;
 - (b) the holder's use of ground signals;
 - (c) the holder's use of aerodromes or heliports;
 - (d) the holder's launching methods; and
 - (e) an emergency response plan.

PART 171: AERONAUTICAL TELECOMMUNICATION SERVICE PROVIDERS (ELECTRONIC SERVICES ORGANISATIONS)

List of regulations

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Flight inspection of navigation equipment

SUBPART 1: GENERAL

Station (site) logs

Applicability

171.03.13

171.03.14

171.01.1 This Part prescribes the –

- (a) regulatory requirements and standards for the approval of organisations that provide, operate, and maintain aeronautical telecommunications used for air traffic services, and radio-navigation services used for air navigation; and
- (b) operating and technical standards for aeronautical telecommunication services used for air traffic services, and aeronautical radio-navigation services used for air navigation.

Requirement for approval

171.01.2 (1) No person or organisation shall install, maintain, repair, modify or calibrate –

- (a) equipment for the use of aeronautical telecommunication services used for air traffic services; or
- (b) equipment for the use of aeronautical radio-navigation services, used for air navigation,

except, under the authority of, and in accordance with the provisions of, an electronic services organisation approval with the appropriate rating issued under this Part and in accordance with the requirements prescribed in Document SA-CATS 171.

Display of electronic services organisation approval

171.01.3 The holder of an electronic services organisation approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

171.01.4 Any advertisement by an organisation indicating that it is an electronic services organisation, shall –

- (a) reflect the number of the electronic services organisation approvals issued by the Director; and
- (b) contain a reference to the category for which the organisation is rated.

Safety inspections and audits

- **171.01.5** (1) An applicant for the issuing of an electronic services organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of an electronic services organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Categories of ratings

171.01.6 The categories of ratings for an electronic services organisation approval are –

- (a) Category A rating;
- (b) Category B rating which allows for the supply and installation of any electronic equipment used for air traffic, and for air navigation services that form part of a service approved under Part 172 and level 3 maintenance, including commissioning, decommissioning, refurbishing and upgrading of telecommunication, surveillance and navigation systems to the standard prescribed in the document SA-CATS 171; and

(c) Category F rating which allows for the flight inspection of any electronic equipment used for air traffic, surveillance and for air navigation services to which the Director may have a requirement, to the standard prescribed in the document SA-CATS 171.

Privileges of approved electronic services organisation

171.01.7 The holder of an electronic services organisation approval with the appropriate rating shall ensure that the privileges of such rating are not exercised unless the electronic services organisation has the necessary facilities, current technical data, tools, equipment, materials and qualified personnel to perform the work in accordance with all current requirements regarding the maintenance of the particular type of equipment.

Limitations on approved electronic services organisation

- **171.01.8** (1) The holder of an electronic services organisation approval may only maintain equipment for which it is approved.
- (2) The holder of an approval shall not maintain equipment for which it is approved unless such holder has available all the facilities, equipment, tooling, technical data and qualified personnel necessary to maintain the equipment in accordance with its manual of procedure and the requirements prescribed in this Part.

Register of approvals

- **171.01.9** (1) The Director shall maintain a register of all electronic services organisation approvals issued in terms of these regulations..
- (2) The register shall contain the following particulars
 - (a) The full name of the holder of the approval;
 - (b) the postal address and physical address of the holder of the approval:
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the rating issued to the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: APPROVAL OF ELECTRONIC SERVICES ORGANISATION

Manual of procedure

- **171.02.1** An applicant for the issuing of an electronic services organisation approval shall provide the Director with its manual of procedure, which shall
 - (a) comply with the requirements prescribed in this Subpart; and
 - (b) contain the information as prescribed in Document SA-CATS 171.

Quality assurance system

- **171.02.2** (1) The applicant shall establish a quality assurance system for the control and supervision of the management of electronic equipment, covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 171.

Accommodation and facilities

- **171.02.3** The applicant shall satisfy the Director that
 - (a) it has adequate facilities for all services to be performed by the electronic services organisation;
 - (b) the working environment is appropriate for each task carried out and, in particular, complies with any special requirements specified in the applicable equipment specification;
 - (c) appropriate office accommodation is provided for the administration of the services performed and, in particular, for the administration of the organisation's safety, planning and technical records;
 - (d) storage facilities are provided for parts, equipment, tools and materials required by the organisation.

Personnel requirements

- **171.02.4** (1) The applicant shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - (i) unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected;

- (iv) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned; and
- (v) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) a competent person who is responsible for safety management, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting aviation safety; and
- (c) adequate personnel to plan, perform, supervise, inspect and certify all services undertaken by such organisation.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, performing, supervising, inspecting or certifying the maintenance undertaken by the organisation.
- (3) The applicant shall ensure that
 - (a) the personnel in all technical departments are of sufficient numbers and experience and have been given appropriate written authority to be able to discharge their allocated responsibilities; and
 - (b) there is full and efficient coordination between departments and within departments.

Equipment, tools and material

- 171.02.5 The applicant shall satisfy the Director that it has
 - (a) the equipment, tools and material necessary to perform adequately the approved scope of work as required by the applicable equipment specification, its manual of procedure and the Regulations in this Part; and
 - (b) established a procedure to control and, where necessary, calibrate test equipment at a frequency and to a standard to ensure serviceability, accuracy and traceability.

Application for approval or amendment thereof

- **171.02.6** An application for the issuing of an electronic services organisation approval, or an amendment thereof, shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 171.02.1.

Issuing of approval

- **171.02.7** (1) The Director shall issue an electronic services organisation approval, if the applicant complies with the requirements prescribed in regulations 171.02.1 to 171.02.5 inclusive.
- (2) The Director shall issue the approval on the appropriate form as prescribed.

Privileges

171.02.8 The privileges of an electronic services organisation approval shall be limited to services authorised by the approval and the appropriate specifications as prescribed in Document SA-CATS 171.

Period of validity

- **171.02.9** (1) An electronic services organisation approval shall be valid for the period determined by the Director, which period shall not exceed five years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval, which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval, which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval, which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Transferability

- **171.02.10** (1) Subject to the provisions of sub-regulation (2), an electronic services organisation approval shall not be transferable.
- (2) A change in ownership of the holder of an approval shall be deemed to be a change of significance referred to in regulation 171.02.12.

Renewal of approval

- **171.02.11** (1) An application for the renewal of an electronic services organisation approval, shall be
 - (a) made to the Director in the appropriate prescribed form; and

- (b) be accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 171.02.1.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Changes in quality assurance system

- **171.02.12** (1) If the holder of an electronic services organisation approval desires to make any change in the quality assurance system referred to in regulation 171.02.2, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 171.02.6 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure, that it will continue to comply with the provisions of regulations 171.02.1 to 171.02.5 inclusive, after the implementation of such approved change.

Duties of holder of approval

- **171.02.13** (1) The holder of an electronic services organisation approval shall
 - (a) hold at least one complete and current copy of its manual of procedure referred to in regulation 171.02.1, at each workplace specified in the manual of procedure;
 - (b) comply with all procedures detailed in the manual of procedure;
 - (c) make each applicable part of the manual of procedure available to the who require those parts to carry out their duties; and
 - (d) continue to comply with the appropriate requirements prescribed in this Part.
- (2) The holder of an approval shall ensure that all persons who will be directly in charge of any maintenance, inspection or commissioning performed on behalf of the electronic services organisation are appropriately authorised and rated.

Record of authorised personnel

- **171.02.14** (1) The holder of an electronic services organisation shall maintain a record of all authorised personnel, which record shall include particulars of the scope of their authorisation.
- (2) The holder of an approval to provide its authorised personnel with evidence of the scope of their authorisation.
- (3) The record referred to in sub-regulation (1) shall be retained by the holder of the approval for a period of five years from the date on which the personnel member ceases to be an employee.

Services records

- **171.02.15** (1) The holder of an electronic services organisation approval shall keep adequate records of all services performed by such organisation.
- (2) The records referred to in sub-regulation (1) shall
 - (a) indicate the name of each person who performed the work;
 - (b) indicate the name of each person who inspected the work; and
 - (c) be retained for at least five years from the date on which the electronic or electronic component to which the work relates, was released to service.
- (3) The holder of an approval provide a copy of each certificate of release to service to the operator of the electronic, together with a copy of any specific equipment specification used for repairs or modifications carried out.
- (4) The holder of an approval shall establish a procedure for recording maintenance details and for the retention of such maintenance records.

Equipment specification

- **171.02.16** (1) The holder of an electronic services organisation approval shall
 - (a) keep all equipment specification and documentation necessary to support the services to be performed by the organisation; and
 - (b) make the equipment specification and documentation available to all personnel who need access to such data to discharge their allocated responsibilities.

SUBPART 3: COMMUNICATION, NAVIGATION, SURVEILLANCE AND METEOROLOGICAL EQUIPMENT

Radio site approval

- **171.03.1** (1) No radio site shall be allowed to come into existence without the prior approval of the Director.
- (2) An application for approval shall be made to the Director on the appropriate form and shall comply with the requirements prescribed in SA-CATS 171.
- (3) An approval shall be granted if the Director being satisfied:
 - (a) as to the intended purpose of the equipment; and
 - (b) that the person or organisation is competent to operate the equipment and that the equipment is fit for its intended purpose.

- (3) The Director shall be notified to the type and availability of operation, of any service, which is available for use by any aircraft.
- (4) The Director may approve a person or organisation to provide particular services in connection with approved equipment.
- (5) The Director may require the flight calibration and/or commissioning of such equipment by an authorised person or organisation.
- (6) The Director may require that the information in sub-regulation (3) be published.

Frequencies, identification codes and call signs

- **171.03.2** (1) No person shall operate
 - (a) a radio navigation aid, unless it has been allocated an operating frequency and identification code by the Director;
 - (b) a radio communication transmitter on an aeronautical radio frequency, unless it has been allocated an operating frequency and call sign by the Director;
 - (c) a radio apparatus licence has been granted in terms of the Electronic Communications Act, 2005 (Act No. 36 of 2005).
- (2) The Director shall allocate an identification code for a navigation aid or call sign for a aeronautical radio communication facility if he or she is satisfied that the allocation of a code or call sign is not contrary to the interest of aviation safety.

Protection of radio sites

171.03.3 No structure or object, whether natural or artificial, which have the potential of interfering or degrading radio signals for the purpose of aviation safety, shall be allowed to come in existence or to move or be moved within the surfaces and slopes as prescribed in the Document SA-CATS 171.

Interference

- **171.03.4** (1) The Director shall be notified of any electromagnetic interference to any facility providing radio signals for the purpose of aviation safety, or any source of interference degrading radio signals for the purpose of aviation safety.
- (2) The Director shall investigate, or cause to be investigate, all reports of interference and may require further action to be taken.

Information provided by an aeronautical facility

171.03.5 No facility providing radio signals for the purpose of aviation safety shall be allowed to continue in operation, if there is a suspicion or any cause to suspect that the information being provided by that facility is erroneous.

Test transmissions

- **171.03.6** (1) No test transmission for the purpose of evaluating a radio site, or the operational viability of a facility or equipment, for the purpose of aviation safety, shall be done without the prior approval of the Director.
- (2) The Director shall be notified as to the purpose and duration of such test transmissions.
- (3) Test transmissions shall contain information indicating that it is a test transmission and comply with the requirements prescribed in Document SA-CATS 171.
- (4) Frequencies allocated for the purpose of testing shall be valid for the duration of the test only and shall not be deemed to negate the requirement in regulation 171.03.2.
- (5) The operation of a temporary facility shall not cause any interference with any other operational facility.

Specifications regarding navigation aids

171.03.7 Navigation Aids shall comply with the Electronic Communications Act, 2005 and the technical standards prescribed in Document SA-CATS 171.

Specifications regarding communication procedures

171.03.8 Communication procedures shall comply to the standards prescribed in Document SA-CATS 171.

Specifications data and voice communication systems

171.03.9 Data and voice communication systems shall comply with the Electronic Communications Act, 2005 and the technical standards prescribed in Document SA-CATS 171.

Specifications regarding surveillance and collision avoidance systems

171.03.10 Surveillance and collision avoidance systems shall comply with the Electronic Communications Act, 2005 and the technical standards prescribed in Document SA-CATS 171.

Specifications regarding radio frequency spectrum utilisation

171.03.11 Radio frequency spectrum utilisation shall comply with the Electronic Communications Act, 2005 and the standards prescribed in Document SA-CATS 171.

Specifications regarding meteorological equipment

171.03.12 Meteorological equipment shall comply with the standards prescribed in Document SA-CATS 171.

Flight inspection of navigation equipment

171.03.13 Navigation equipment is subject to commissioning and periodic flight inspection as prescribed in Document SA-CATS 171.

Station (site) logs

171.03.14 Site logs shall be kept for all facilities used to provide an aeronautical telecommunication service or a radio navigation service as prescribed in Document SA-CATS 171.

PART172: AIRSPACE AND AIR TRAFFIC SERVICES

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SUBPART 4: GNSS ATS PROVISIONS

172.04.1 GNSS ATS requirements

SUBPART 1: GENERAL

Applicability

172.01.1 This Part applies to –

- (a) the allocation of air traffic services;
- (b) the designation and classification of airspace;
- (c) the approval and operation of ATSUs which provide air traffic services;
- (d) the designation of search and rescue regions; and
- (e) the provision of search and rescue services within those regions, and matters

Allocation of air traffic services

- **172.01.2** (1) The Director shall determine the portions of airspace and the aerodromes which shall be provided with air traffic services to
 - (a) prevent collisions between aircraft;
 - (b) prevent collisions between aircraft on the manoeuvring area of the aerodrome concerned and obstructions on such area;
 - (c) expedite and maintain an orderly flow of air traffic;
 - (d) provide advice and information useful for the safe and efficient conduct of flights; and
 - (e) provide search and rescue and related support services.
- (2) The need for the provision of air traffic services and the discontinuation thereof shall be determined after consideration of *inter alia*:

- (a) The sustainable commercial viability of a proposed air traffic service, including the costs incurred in setting up the service as well as the projected maintenance costs:
- (b) Forecast of air traffic movements and their composition;
- (c) The level of communication services available;
- (d) The adequacy of appropriate surveillance;
- (e) The availability of flight information systems;
- (f) The proximity of other aerodromes;
- (g) Surrounding terrain;
- (h) Navigation and approach systems;
- (i) Abnormal circuit patterns;
- (j) The flexibility of use of airspace;
- (k) Environmental aspects;
- (I) Seasonal weather patterns;
- (m) National security requirements; and
- (n) Any other factors which may be relevant.
- (3) The study, referred to in sub-regulation (2), shall be accompanied by a detailed business case, safety case and risk assessment, must be conducted in accordance with Document SA-CATS 172.

Providing of an ATS at own initiative

172.01.3 The provisions of regulation 172.01.2(2) does not preclude an aerodrome licence holder from providing at his or her own initiative air traffic services that comply with the minimum required level.

Requirement for ATSU approval

172.01.4 No ATSU shall provide air traffic services including –

- (a) aerodrome control services;
- (b) approach control services;
- (c) area control services;
- (d) approach surveillance services;
- (e) area surveillance control services;
- (f) flight information services; and
- (g) aerodrome flight information service,

in those portions of airspace and the aerodromes determined by the Director in terms of regulation 172.01.2, except under the authority of and in accordance with the provisions of an ATSU approval issued under this Part.

Display of ATSU approval

172.01.5 The holder of an ATSU approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of

the approval is displayed, shall produce the original approval to an ATS inspector if so requested by such inspector.

Safety inspections and audits

- **172.01.6** (1) An applicant for an ATSU approval shall permit an ATS inspector to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of regulation 172.03.5.
- (2) The holder of an ATSU approval shall permit an ATS inspector to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this part.

Register of approvals

- **172.01.7** (1) The Director shall maintain a register of all ATSU approvals issued in terms of the regulations in this Part.
- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the approval;
 - (b) the business address of the holder of the approval;
 - (c) the postal address of the holder of the approval;
 - (d) the date on which the approval was issued or renewed;
 - (e) the type of ATS in respect of which the approval was issued;
 - (f) the date on which the approval was suspended, if applicable; and
 - (g) the date on which the approval expires.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Substitute ATS provider

172.01.8 The Director may, if the Director considers it necessary in the interests of aviation safety, appoint the holder of an ATSU approval as a substitute ATS provider to provide an ATS in respect on an approval which has been suspended by an ATS inspector for the duration of such suspension

SUBPART 2: DESIGNATION AND CLASSIFICATION OF AIRSPACE

Designation of airspace

- 172.02.1 (1) The Director may designate a particular portion of the airspace as a -
 - (a) flight information region;
 - (b) advisory area;
 - (c) control area;
 - (d) control zone;
 - (e) special rules area;
 - (f) aerodrome traffic area;
 - (g) aerodrome traffic zone;
 - (h) prohibited area;
 - (i) restricted area; or
 - (j) danger area.
- (2) A particular portion of the airspace must only be designated in terms of sub-regulation (1)
 - (a) after consultation with the National Airspace Committee instituted in terms of Part 11; and
 - (b) in relation to the air traffic services which are to be provided.
- (3) The Director must publish the designation of a particular portion of the airspace in accordance with the AIRAC cycle in the AIP, AIP SUP or NOTAM.
- (4) The Director may, on a temporary basis, designate a particular portion of the airspace after consultation with all ATS providers operating in the designated portions of the airspace adjacent to such portion.

Classification of airspace and level of service provision

- **172.02.2** (1) The Director may classify airspace in accordance with the classes as prescribed in Document SA-CATS 172, for the purposes of providing air traffic services, and may also prescribe the type of air traffic surveillance systems and the level of air traffic services to be implemented in such airspace.
- (2) The Director shall publish the classification of airspace in accordance with the AIRAC cycle in the AIP, AIP SUP or NOTAM.

Designation of control areas

172.02.3 (1) The Director shall, when designating a particular portion of the airspace as a control area in terms of regulation 172.02.1, prescribe the horizontal and vertical limits of such area.

- (2) The lowest limit of designated control areas shall be at least 700 feet above the ground or water.
- (3) Control zones and aerodrome traffic zones shall extend upwards from the surface of the earth.

Designation of flight information regions

172.02.4 The Director shall, when designating a particular portion of the airspace as a flight information region in terms of regulation 172.02.1, prescribe the borders of such region and make such designation in accordance with the requirements as prescribed in document SA-CATS 172.

Designation of advisory areas

172.02.5 The Director shall, when designating a particular portion of the airspace as an advisory area in terms of regulation 172.02.1, prescribe the horizontal and vertical limits of such area.

SUBPART 3: APPROVAL OF AIR TRAFFIC SERVICE UNIT

Manual of procedure

- **172.03.1** An applicant for an ATSU approval to provide air traffic services, shall provide the Director with its manual of procedure which shall
 - (a) comply with the requirements prescribed in this subpart; and
 - (b) contain the information as prescribed in Document SA-CATS 172.

Quality assurance system

- **172.03.2** (1) The applicant shall establish a quality assurance system for the control and supervision of the services covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 172.

Personnel requirements

- **172.03.3** (1) The applicant shall engage, employ or contract
 - (a) a senior person identified as the accountable manager and compliance officer of the unit concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the unit are carried out in accordance with the applicable requirements prescribed in this subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:

- (i) Unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the unit;
- (ii) full rights of consultation with any such person in respect of such compliance by him or her;
- (iii) powers to order cessation of any activity where such compliance is not effected;
- (i) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the unit concerned; and
- (v) powers to report directly to the management of the unit on his or her investigations and consultations generally, and in cases contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- (b) standards officer who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting aviation safety; and
- (c) adequate licensed personnel to plan, provide and supervise the services listed in its manual of procedure, in a safe and efficient manner.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of the personnel required to operate and maintain the unit concerned.
- (3) The applicant shall ensure that its personnel are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities.

Facility requirements

172.03.4 The applicant shall ensure that all facilities used in the provision of the services listed in its manual of procedure are adequate to comply with the requirements as prescribed in Document SA-CATS 172.

Application for approval or amendment thereof

- **172.03.5** An application for an ATSU approval or an amendment thereof, shall be
 - (a) made to the Director on the appropriate prescribed form; and
 - (b) accompanied by
 - (i) the manual of procedure referred to in regulation 172.03.1; and
 - (ii) the appropriate fees prescribed in Part 187.

Issuing of approval

- **172.03.6** (1) The Director shall issue an ATSU approval if the applicant complies with the requirements prescribed in regulations 172.03.1 to 172.03.4 inclusive.
- (2) The Director shall issue the approval on the appropriate prescribed form.
- (3) The approval shall authorise the provision of
 - (a)a single ATS by means of a single ATSU; or
 - (b) a combination of air traffic services by means of a network of ATSUs.

Scope of approval

172.03.7 The holder of an approval shall be entitled to provide one or a combination of the services listed in its manual of procedure.

Period of validity

- **172.03.8** (1) An approval shall be valid for a period of one year, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an ATS inspector, or cancelled by the Director.
- (3) The holder of an approval which expires, shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the ATS inspector concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Renewal of approval

- **172.03.9** (1) An application for the renewal of an ATSU approval shall be
 - (a) made to the Director in the appropriate prescribed form; and
 - (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedure referred to in regulation 172.03.1.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Transferability

- **172.03.10** (1) Subject to the provisions of sub-regulation (2), an approval shall not be transferable.
- (2) A change in ownership of the holder of an approval shall be deemed to be a change of significance referred to in regulation 172.03.11.

Changes in quality assurance system

- **172.03.11** (1) if the holder of an approval desires to make any change in the quality assurance system referred to in regulation 172.03.2, which is significant to the showing of compliance with the appropriate requirements prescribed in this part, such holder shall apply to the Director for the approval of such change.
- (2) The provisions of regulation 172.03.5 shall apply with the necessary changes to an application for the approval of a change in the quality assurance system.
- (3) An application for the approval of a change in the quality assurance system shall be granted by the Director if the applicant satisfies the Director, upon submission of appropriate proposed changes to its manual of procedure, that it will continue to comply with the provisions of regulations 172.03.1 to 172.03.4 inclusive, after the implementation of such approved change.

Duties of holder of approval

172.03.12 The holder of an approval must –

- (a) provide the services listed in its manual of procedure, and comply with the required standards, in accordance with the standards and procedures as prescribed in Document SA-CATS 172;
- (b) hold at least one complete and current copy of its manual of procedure referred to in regulation 172.03.1; at each ATSU specified in the manual of procedure;
- (c) comply with all procedures detailed in the manual of procedure;
- (d) make each applicable part of the manual of procedure available to the personnel who require those parts to carry out their duties;
- (e) continue to comply with the appropriate requirements prescribed in this Part;
- (f) keep the records of all internal inspections conducted in terms of regulation 172.03.15 for a period of five years from the date of each inspection;
- (g) furnish the Director with the en route facility financial data and en route facility traffic statistics as prescribed in Document SA-CATS 172;
- (h) replace or upgrade any obsolete installation;

- (i) apply the procedures as prescribed in Document SA-CATS 172, when notified of an accident or incident in terms of regulations 12.02.1,12.02.2 or 12.02.3, as the case may be;
- (j) investigate any ATS incident of which such holder is notified in terms of regulation 12.02.2 (3) and report to the investigator-in-charge in the appropriate prescribed form;
- (k) where PBN has been implemented, monitor the system to ensure maintenance of system safety, air navigation performance and make periodic safety assessments in accordance with SA-CATS 172;
- (I) establish and implement formal procedures for co-ordination between ATS and Operators, Military Authorities, Meteorological Services and AIS, where required;
- (m) develop and implement contingency plans for implementation in the event of disruption or potential disruption, of air traffic services and related supporting services in the airspace for which they are responsible for the provision of such services; and
- (n) ensure that the plans referred to in paragraph (m) are closely coordinated with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and submitted for approval to the ICAO Council.

Station standing instructions manual

172.03.13 The holder of an approval shall provide each ATSU listed in its manual of procedure referred to in regulation 172.03.1, a station standing instructions manual which shall –

- (a) set out the procedures for the operation of the ATSU concerned; and
- (b) contain the information as prescribed in document SA-CATS 172.

Documentation

172.03.14 (1) The holder of an approval shall provide each ATSU listed in its manual of procedure referred to in regulation 172.03.1, with copies of the documentation as prescribed in Document SA-CATS 172.

- (2) The holder shall ensure that
 - (a) the documentation is reviewed and authorised by appropriate personnel before issue:
 - (b) current issues of relevant documentation are available to personnel at all locations where they need access to such documentation for the provision of the services listed in its manual of procedure referred to in regulation 172.03.1;
 - (c) obsolete documentation is removed from all points of issue or use;

- (d) changes to documentation are reviewed and approved by appropriate personnel; and
- (e) the current version of each item of documentation can be identified to preclude the use of obsolete editions.

Internal inspection

172.03.15 The holder of an approval shall conduct –

- (a) internal inspections of each ATSU listed in its manual of procedure referred to in regulation 172.03.1;
- (b) internal inspections, testing and calibration of each facility listed in its manual of procedure referred to in regulation 172.03.1, in accordance with the requirements as prescribed in Document SA-CATS 172.

Air traffic control clearances

172.03.16 The contents of an air traffic control clearance given by an air traffic control unit and the coordination of air traffic control clearances between air traffic control units, shall be as prescribed in Document SA-CATS 172.

Responsibility for control

- **172.03.17** (1) Only one air traffic control unit shall control a controlled flight at any given time.
- (2) An air traffic control unit may transfer the responsibility for control of an aircraft or group of aircraft to another air traffic control unit: Provided that coordination between such air traffic control units are effected in terms of regulation 172.03.18.

Transfer of responsibility for control

- **172.03.18** (1) The holder of an approval shall ensure that, where transfer of responsibility for control takes place between one air traffic control unit and any other air traffic control unit, the procedures as prescribed in the letter of agreement are complied with, to ensure safe coordination.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a transfer of responsibility for control referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 172.

Reporting and investigation of accidents and incidents

- **172.03.19** (1) The holder of an approval shall report to the Director any accident or incident reported to or witnessed by the ATS such holder, to the Director.
- (2) The types of incidents and their associated definition that shall be reported are prescribed in the Document SA-CATS 172

(3) The reporting and investigation of accidents and incidents by the holder of an approval, shall be done in accordance with the requirements as prescribed in Part 12.

Reporting of aeronautical information

172.03.20 The holder of an approval shall as soon as practicable after obtaining any aeronautical information, notify the Director of –

- (a) information on aerodrome aeronautical conditions, and any change thereto, which are relevant and applicable in its area of responsibility;
- (b) the operational and serviceability status of associated facilities, services and navigation aids within its area of responsibility;
- (c) any other information considered to be of operational significance; and
- (d) meteorological information as required for the safe and expeditious operation of flights.

SUBPART 4: GNSS ATS PROVISIONS

GNSS ATS requirements

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PART 173: FLIGHT PROCEDURE DESIGN

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SUBPART 1: GENERAL

Applicability

173.01.1 (1) This Part applies to –

- (a) the design, maintenance, revision, amendment and adaptation of flight procedures; and
- (b) the approval and operation of organisations conducting flight procedure design, maintenance, revision, amendment or adaptation.
- (2) This Part does not apply to
 - (a) the design of flight procedures for use by aircraft in circumstances where one or more engines of the aircraft have become inoperative while on an IFR flight, unless such flight procedures are designed under a PBN including RNP-AR rating; and
 - (b) an organisation which carries out flight procedure design on procedures for use by aircraft in circumstances where one or more engines of the aircraft have become inoperative while on an IFR flight, unless such flight procedures are designed under a PBN including RNP-AR rating.

Requirement for approval

173.01.2 No organisation shall design, maintain, review, amend or adapt flight procedures except under the authority of, and in accordance with the provisions of, a flight procedure design approval with the appropriate rating issued under this Part.

Display of flight procedure design approval

173.01.3 The holder of a flight procedure design approval shall display the approval in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Safety inspections and audits

- **173.01.4** (1) An applicant for a flight procedure design approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of any application made in terms of this Part.
- (2) The holder of a flight procedure design approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.
- (3) The holder of a flight procedure design approval shall, permit an authorised officer, inspector or authorised person to
 - (a) observe the practices and procedures of the holder in performing flight procedure design;
 - (b) inspect and test any systems and equipment used for, or in relation to, flight procedure design.

Ratings

- **173.01.5** The ratings for a flight procedure design approval are
 - (a) a conventional non-precision rating as prescribed in Document SA-CATS 173;
 - (b) a conventional precision rating as prescribed in Document SA-CATS 173;
 - (c) a PBN excluding RNP-AR rating as prescribed in Document SA-CATS 173; and
 - (d) a PBN including RNP-AR rating as prescribed in Document SA-CATS 173.

Register of approvals

173.01.6 (1) The Director shall maintain a register of all flight procedure design approvals issued in terms of this Part.

- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the approval;
 - (b) the postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the scope of the approval issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the approval is issued.
- (4) The register shall be kept in a safe place at the office of the Director.
- (5) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Training and checking

- **173.01.7** (1) The holder of a flight procedure design approval shall establish and maintain a training and checking programme for all personnel referenced in this Subpart that will ensure such personnel are adequately trained and qualified to perform their assigned duties.
- (2) The training programme referred to in sub-regulation (1) shall be approved by the Director as provided in sub-regulation (7).
- (3) The holder shall ensure that
 - (a) prior to assignment to duty, each person required to receive training in accordance with this Subpart, shall, whether employed on a full or part time basis, receives such training as appropriate to his or her duties; and
 - (b) the training facilities, equipment and personnel are acceptable to the Director and, in the case of training checking personnel, meeting the requirements prescribed in Document SA-CATS 173.
- (4) The training programme referred to in sub-regulation (1) shall include a system of record keeping as prescribed in regulation 173.01.14.
- (5) The training records referred to in sub-regulation (4) shall be retained as prescribed in regulation 173.01.14(3).
- (6) The holder shall publish the training programme referred to in sub-regulation (1) in the operations manual referred to in regulations 173.02.1 and 173.03.1 as applicable.
- (7) The holder shall submit for the approval of the Director as prescribed in Document SA-CATS 173, its training programme and any amendments thereto.

- (8) The holder shall provide training to its personnel that includes at least the following training components:
 - (a) Flight procedure design training on an initial basis pertinent to the rating held; and
 - (b) Recurrent flight procedure training;
- (9) Only approved training as prescribed in Document SA-CATS 173 shall be considered for the initial and recurrent training referred to in sub-regulation (8).
- (10) The training required by sub-regulation (8)(b) shall be provided on a recurrent basis at intervals not exceeding the duration specified in Document SA-CATS 173.

Quality assurance system

- **173.01.8** (1) The applicant shall establish a quality assurance system for the control and supervision of the services covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 173.

Facilities and equipment

- **173.01.9** (1) The applicant shall satisfy the Director that it has facilities and equipment necessary to perform adequately the approved scope of flight procedure design, including
 - (a) providing premises and equipment appropriate for the applicant's personnel to perform flight procedure design taking into account the critical effect that human factors can have on the quality of the work of the personnel; and
 - (b) ensuring that those employees have access to all necessary data for designing flight procedures including but not limited to
 - (i) accurate and current databases or charts detailing terrain and obstacle information; and
 - (ii) accurate and current navigation aid coordinate data; and
 - (iii) accurate and current aerodrome survey data.
- (2) The applicant shall, if an aeronautical database and aeronautical data is utilised for designing flight procedures, have, and put into effect, procedures as prescribed in Document SA-CATS 173 and approved by the Director to ensure the integrity of the database and the data.

Application for approval or amendment of flight procedure design approval

173.01.10 (1) An application for a flight procedure design approval, or an amendment thereof, shall be –

- (a) made to the Director in the appropriate prescribed form; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the operations manual referred to in regulations 173.02.1 and 173.03.1 as applicable.
- (2) If an applicant was previously issued with a flight procedure design approval, and the approval was cancelled, the applicant shall include with the application any information to prove that the applicant would be in a position to comply with all requirements pertaining to the design of flight procedures of the rating or ratings concerned.

Issuing of a flight procedure design approval

173.01.11 (1) The Director may issue a flight procedure design approval if the Director is satisfied that –

- (a) the applicant meets the requirements prescribed in this Part;
- (b) the applicant's personnel required by this Part are competent personnel;
- (c) the applicant's senior personnel have not held a senior position in an organisation whose approval was cancelled by the Director or the Minister;
- (d) the granting of the approval is not contrary to the interests of aviation safety.
- (2) The flight procedure design approval referred to in sub-regulation (1) shall contain
 - (a) the organisation's name and principal place of business;
 - (b) the rating or ratings covered by the approval:
 - (c) any conditions applicable to the approval;
 - (d) the date when the approval becomes effective; and
 - (e) any other information that the Director deems necessary.
- (3) The Director may grant an approval in respect of only some or all of the ratings sought in the application.
- (4) A replacement approval shall be issued by the Director on payment of the appropriate fee as prescribed in Part 187, in the event that the original certificate is no longer valid or has been lost or destroyed.

Period of validity of a flight procedure design approval

173.01.12 (1) A flight procedure design approval is valid for the period of one year, calculated from the date of issuing or renewal thereof.

- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.
- (3) The holder of an approval which expires shall forthwith surrender the approval to the Director.
- (4) The holder of an approval which is suspended, shall forthwith produce the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (5) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the Director.

Renewal of flight procedure design approval

- 173.01.13 (1) An application for the renewal of a flight procedure design approval, shall be
 - (a) made to the Director on the appropriate prescribed form; and
 - (b) be accompanied by
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the operations manual referred to in regulations 173.02.1 and 173.03.1 as applicable.
- (2) The holder of an approval shall, at least 90 days immediately preceding the date on which such approval expires, apply to the Director for the renewal of such approval.

Documents and records

- 173.01.14 (1) The holder of a flight procedure design approval, shall -
 - (a) keep copies of all relevant documents which may be necessary as prescribed in Document SA-CATS 173
 - (i) for the specified flight procedure design conducted by such holder; and
 - (ii) to determine compliance with the appropriate requirements prescribed in this Subpart; and
 - (b) establish procedures to control the documents referred to in paragraph (a).
- (2) The holder of the approval shall establish procedures to identify, collect, index, store and maintain all records which may be necessary
 - (a) for the specified flight procedure design conducted by such holder; and

- (b) to determine compliance with the appropriate requirements prescribed in this Subpart.
- (3) The procedures referred to in sub-regulation (3) shall be made to ensure that
 - (a) a record is kept of each quality control review of the holder of the approval;
 - (b) a record is kept of each person who conducts the specified flight procedure design, including particulars of the competence assessments and experience of each such person;
 - (c) a record is kept of each student being trained or assessed by the holder of the approval, including particulars of enrolment, attendance, modules, instructor comments and any design or similar practical sessions and assessments of each such student;
 - (d) all records are legible; and
 - (e) records are kept for the period specified per type of record as prescribed in Document SA-CATS 173, calculated from the date of the last entry made in such records.

SUBPART 2: APPROVAL OF FLIGHT PROCEDURE DESIGN ORGANISATION (CATEGORY A)

Operations manual

173.02.1 (1) An applicant for a flight procedure design approval issued in terms of this subpart shall provide the Director with its operations manual which –

- (a) complies with the requirements prescribed in this Subpart;
- (b) contains the information prescribed in Document SA-CATS 173; and
- (c) shall be subject to approval as prescribed in Document SA-CATS 173.
- (2) The holder of an approval shall -
 - (a) keep the operations manual in a readily accessible form and place;
 - (b) ensure that each amendment to its operations manual meets the applicable requirements of this Part:
 - (c) comply with the amendment procedures contained in its operations manual.
- (3) The holder of an approval who intends to change any part of its operations manual shall apply to and obtain the prior approval of the Director before effecting such change.

- (4) The Director may specify conditions under which an approval holder must operate during or following any changes applied for as referred to in sub-regulation (3), to ensure continued compliance with the requirements of this Part.
- (5) The holder of an approval shall comply with all conditions specified as referred to in sub-regulation (4).
- (6) If any change to an operations manual referred to in this regulation requires an amendment to the approval, the holder shall forward the operations manual to the Director immediately after the amended operations manual has been issued.
- (7) The holder of an approval shall make such amendments to its operations manual which the Director may deem necessary in the interests of aviation safety.

Personnel requirements

173.02.2 (1) The applicant shall engage, employ or contract –

- (a) a person identified as the chief designer of the organisation concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with the following powers and duties in respect of the compliance with such requirements:
 - access to design work performed or design activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
 - (ii) full rights of consultation with any such person in respect of such compliance by him or her;
 - (iii) powers to order cessation of any design activity where such compliance is not effected;
 - (iv) powers to report directly to the management of the organisation on his or her investigations and consultations generally, and in cases referred to in subparagraph (iii), and with regard to the results of the liaison referred to in subparagraph (v);
 - (v) a duty to establish liaison mechanisms with the Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the organisation concerned;
 - (vi) a duty to ensure that any flight procedure design covered by the approval is performed as prescribed in Document SA-CATS 173;

- (b) supervisory personnel, if the applicant intends to provide on-the-job training to designers and such supervisory personnel may also be the chief designer;
- (c) sufficient qualified designers to plan, supervise, conduct and verify the design of flight procedures covered by the approval.
- (2) The applicant's chief designer referred to in paragraph (a) of sub-regulation (1) shall meet the minimum requirements prescribed in Document SA-CATS 173.
- (3) Should the applicant engage, employ or contract a person as supervisory personnel referred as contemplated in paragraph (b) of sub-regulation (1), such person shall meet the minimum requirements prescribed in Document SA-CATS 173.
- (4) The applicant's qualified designers referred to in paragraph (b) of sub-regulation (1) shall meet the minimum requirements prescribed in Document SA-CATS 173.
- (5) An applicant shall not engage, employ or contract a person as a chief designer unless prior notification has been given to the Director.
- (6) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of those personnel involved in planning, supervising, conducting or verifying the design activities covered by the approval, as prescribed in SA-CATS 173.

Privileges

173.02.3 The privileges of a flight procedure design approval shall be limited to flight procedure design for which the approval is rated and shall be to design, maintain, revise, amend and adapt flight procedures.

Duties of approval holder

- **173.02.4** (1) The holder of a flight procedure design approval shall
 - (a) keep at least one complete and current copy of its operations manual referred to in regulation 173.02.1, at each workplace specified in the operations manual;
 - (b) comply with all procedures detailed in the operations manual;
 - (c) make each applicable part of the operations manual available to the personnel who require those parts to carry out their duties;
 - (d) continue to comply with the appropriate requirements prescribed in this Part; and
 - (e) ensure that flight procedures are designed to the appropriate standard as prescribed in Document SA-CATS 173.
- (2) In performing flight procedure design, the holder of a flight procedure design approval shall

- (a) design each flight procedure as prescribed in Document SA-CATS 173; and
- (b) verify each designed flight procedure as prescribed in Document SA-CATS 173; and
- submit flight procedures designed and verified as referred to in paragraphs (a) and
 to the Director for ground and flight validation as prescribed in Document SA-CATS 173;
- (d) adhere to the approval process defined in Document SA-CATS 173; and
- (e) ensure that flight procedures submitted as required in paragraph (c) are accompanied by the appropriate fee prescribed in Part 187.
- (3) The holder of a flight procedure design approval shall, subject to regulation 173.02.4, maintain each flight procedure as prescribed in Document SA-CATS 173 periodically at intervals and upon the conditions prescribed in Document SA-CATS 173.
- (4) The holder of a flight procedure design approval shall ensure that a flight procedure covered by the holder's approval shall not make use of a ground-based radio-navigation aid other than one that is operated and approved in terms of Part 171.
- (5) The holder of a flight procedure design approval shall ensure that each person who is occupying or acting in a supervisory position in the holder's organisation in relation to flight procedure design, meets the standards for supervisory personnel as prescribed in regulation 173.02.2(3).
- (6) If the holder of a flight procedure design approval intends to cease to perform flight procedure design of a particular rating, the holder shall apply to the Director for an amendment as prescribed regulation in 173.01.10(1).
- (7) If the holder of a flight procedure design approval ceases to be responsible for the maintenance of a flight procedure, the holder shall give written notice to that effect to the Director as soon as practicable after ceasing to perform the flight procedure design concerned.

Transferability of maintenance of flight procedures

- **173.02.5** (1) The holder of a flight procedure design approval may transfer its responsibility for maintaining a flight procedure under regulation 173.02.4(3) to another organisation whose flight procedure design approval authorises that organisation to design flight procedures of the same rating as the flight procedure concerned.
- (2) If the organisation referred to in sub-regulation (1) accepts responsibility for the maintenance of a flight procedure under this Part, the organisation concerned shall
 - (a) give written notice to the transferor to that effect;

- (b) give written notice of the transfer to the Director within 14 days after the transfer; and
- (c) include in the notices referred to in paragraphs (a) and (b), the date on which the transfer takes effect.
- (3) If the holder of a flight procedure design approval transfers its responsibility for maintaining a flight procedure, it shall give written notice of the transfer to the Director within 14 days after the transfer.

SUBPART 3: APPROVAL OF FLIGHT PROCEDURE DESIGN ORGANISATION (CATEGORY B)

Operations manual

173.03.1 (1) An applicant for a flight procedure design approval in terms of this subpart shall provide the Director with its operations manual which —

- (a) complies with the requirements prescribed in this Subpart; and
- (b) contains the information prescribed in Document SA-CATS 173.
- (c) shall be subject to approval as prescribed in Document SA-CATS 173.
- (2) The holder of a flight procedure design approval must ensure that the details in its operations manual provide a current description of the organisation.
- (3) The holder of an approval must
 - (a) keep the operations manual in a readily accessible form and place;
 - (b) ensure that each amendment to its operations manual meets the applicable requirements of this Part;
 - (c) comply with the amendment procedures contained in its operations manual.
- (4) The holder of an approval must provide the Director with a copy of each amendment to its operations manual as soon as practicable after the amendment has been incorporated into the operations manual.
- (5) If any change referred to in sub-regulation (4) requires an amendment to the approval, the holder must forward the operations manual to the Director immediately after the amended operations manual has been issued.
- (6) The holder of an approval must make such amendments to its operations manual as the Director may consider necessary in the interests of aviation safety.

Personnel requirements

- **173.03.2** (1) The applicant shall engage, employ or contract a person identified as the qualified designer of the organisation concerned, to whom contractual authority has been granted to ensure that all design activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with a duty to ensure that any flight procedure design covered by the approval is performed as prescribed in Document SA-CATS 173.
- (2) The applicant's qualified designer referred to in sub-regulation (1) shall meet the minimum requirements prescribed in Document SA-CATS 173.

Privileges

- **173.03.3** The privileges of a flight procedure design approval issued in terms of this Subpart are limited to flight procedure design for which the approval is rated and are
 - (a) to adapt to the conservative a flight procedure for use by South African registered aircraft operating at, or in the vicinity of an aerodrome in a foreign country, as prescribed in Document SA-CATS 173;
 - (b) to design, maintain, review or amend a flight procedure for use by South African registered aircraft operating at, or in the vicinity of an off-shore installation located no closer than 30NM from the nearest land.

Duties of approval holder

- 173.03.4 (1) The holder of a flight procedure design approval shall
 - (a) keep at least one complete and current copy of its operations manual referred to in regulation 173.03.1, at each workplace specified in the operations manual;
 - (b) comply with all procedures detailed in the operations manual;
 - (c) continue to comply with the appropriate requirements prescribed in this Part.
 - (d) ensure that flight procedures are designed, reviewed, amended and adapted as prescribed in Document SA-CATS 173.
- (2) In performing flight procedure design, the holder of a flight procedure design approval shall design, adapt and verify each flight procedure as prescribed in Document SA-CATS 173.
- (3) The holder of a flight procedure design approval shall, subject to regulation 173.03.5, maintain each flight procedure or adaptation thereof upon the conditions prescribed in Document SA-CATS 173.

(4) If the holder of a flight procedure design approval ceases to be responsible for the maintenance of a flight procedure, the holder shall give written notice to that effect to the Director as soon as practicable after ceasing to perform the flight procedure design concerned.

Transferability of maintenance of flight procedures

- **173.03.5** (1) The holder of a flight procedure design approval may transfer its responsibility for maintaining a flight procedure under regulation 173.03.4(3) to another organisation whose flight procedure design approval authorises that organisation to design flight procedures of the same rating as the flight procedure concerned.
- (2) If the organisation referred to in sub-regulation (1) accepts responsibility for the maintenance of a flight procedure under this Part, the organisation concerned shall
 - (a) give written notice to the transferor to that effect;
 - (b) give written notice of the transfer to the Director within 30 days after the transfer; and
 - (c) include in the notices referred to in paragraphs (a) and (b), the date on which the transfer takes effect.
- (3) If the holder of a flight procedure design approval transfers its responsibility for maintaining a flight procedure, it shall give written notice of the transfer to the Director within 30 days after the transfer.

PART 174: METEOROLOGICAL INFORMATION SERVICES

List of regulations

174.00.1 Applicability

174.00.2 Designation of meteorological information organisation

Applicability

174.00.1 This Part applies to the provision of meteorological information services.

Designation of meteorological information organisation

- **174.00.2** (1) The South African Weather Service (SAWS) is designated as the aviation meteorological authority to fulfil the international obligations of the Government under the Convention in terms of section 3 of the South African Weather Service Act, 2001 (Act No 8 of 2001).
- (2) The services rendered by SAWS include the following –

- (a) climatology services for the development and supply of climatological summaries;
- (b) forecast services for the supply of forecast meteorological information for the specific aerodrome, area or portion of airspace;
- (c) information dissemination service for the collection and dissemination of meteorological information;
- (d) meteorological briefing service to aeronautical users (air traffic services, operators and flight crew members) for the supply of written and oral meteorological information on existing and expected meteorological conditions;
- (e) meteorological reporting service for the supply of aerodrome meteorological reports;
- (f) meteorological watch services for the monitoring and prediction of meteorological conditions affecting aircraft operations in a specific area and at specific aerodromes;
- (g) provision of flight documentation;
- (h) meteorological support for search and rescue; and
- (i) any other meteorological service which is deemed as desirable by recognised aviation organisations and/or service providers or to which an operational requirement may exist.

PART 175: AERONAUTICAL INFORMATION SERVICES

List of regulations

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175.03.5	Error correction in published information

SUBPART 1: GENERAL

Applicability

- **175.01.1** This Part applies to
 - (a) the certification and operation of organisations providing an aeronautical information service; and
 - (b) the provision of the IAIP.

Requirements for AIS certificate

175.01.2 No organisation shall provide an aeronautical information service unless such organization holds a certificate complying with the requirements in this Part and appropriate to the duties being performed.

Provision of AIS at own initiative

175.01.3 The provisions of this Part does not preclude an aerodrome licence holder from providing at his or her own initiative aeronautical information services, excluding NOTAM, that comply with the minimum required level for the issue of a license.

Display of AIS certificate

175.01.4 The holder of AIS certificate shall display the certificate in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the certificate is displayed, shall produce the original to an authorized officer if so requested by such authorized officer.

Safety inspections and audits

175.01.5 An applicant for the issuing of AIS certificate shall permit an authorised officer to carry out such inspections and audits which may be necessary to verify the validity of any application made in terms of this Part.

Register of certificates

175.01.6 (1) The Director shall maintain a register of all AIS certificates issued in terms of this Part.

- (2) The register shall contain the following particulars:
 - (a) The full name of the holder of the certificate;
 - (b) the business address of the holder of the certificate;
 - (c) the postal address of the holder of the certificate;
 - (d) the date on which the certificate was issued or renewed;
 - (e) the type of AIS in respect of which the certificate was issued;
 - (f) the date on which the certificate was suspended, if applicable; and
 - (g) the date on which the certificate expires.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven (7) working days from the date on which the certificate is issued.
- (4) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2: REQUIREMENTS FOR AIS CERTIFICATE

Manual of procedure

- 175.02.1 An applicant for an AIS certificate shall provide the Director with its manual of procedure which shall
 - (a) comply with the requirements prescribed in this subpart for the service to be provided.; and
 - (b) contain the information as prescribed in Document SA-CATS 175.

Quality assurance system

- **175.02.2** (1) The applicant shall establish a quality assurance system for the management of the services covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 175.
- (3) Should the organization already have an established quality assurance system approved under an alternate Part of these Regulations, such quality assurance system may be approved in terms of this Part provided the provisions of sub-regulation (2) are met.

Personnel requirements

175.02.3 (1) The applicant shall engage, employ or contract -

- (a) a senior person identified as the accountable manager and compliance officer of the unit concerned, to whom contractual authority has been granted to ensure that all activities undertaken by the unit are carried out in accordance with the applicable requirements prescribed in this subpart, and who shall in addition be vested with the following powers and duties in respect of compliance with such requirements:
 - (i) unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the unit;
 - (ii) full rights of consultation with any such persons in respect of such compliance by him or her;
 - (iii) powers to order cessation of any activity where such compliance is not effected;
 - (iv) a duty to establish liaison mechanisms with Director with a view to ascertain correct manners of compliance with the said requirements, and interpretations of such requirements by the Director, and to facilitate liaison between the Director and the unit concerned; and
 - (v) powers to report directly to the management of the unit on his or her investigations and consultations generally, and in case contemplated in subparagraph (iii), and with regard to the results of the liaison contemplated in subparagraph (iv);
- standards officer who is responsible for quality control, and who has direct access to the accountable manager and compliance officer referred to in paragraph (a) on matters affecting aviation safety; and
- (c) adequate trained personnel to
 - (i) plan, provide and supervise the services listed in its manual of procedure, in a safe efficient manner; and

- (ii) collect, collate, check, coordinate, edit, and publish aeronautical information for the aeronautical information services listed in the applicant's manual.
- (2) The applicant shall establish a procedure for initially assessing, and a procedure for maintaining, the competence of the personnel as prescribed in Document SA-CATS 175.
- (3) The applicant shall ensure that its personnel are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities.

Facility requirements

175.02.4 The applicant shall ensure that all facilities used in the provision of services listed in its manual of procedures are adequate and comply with the minimum requirements as prescribed in SA-CATS 175.

Application for approval or amendment of certificate

175.02.5 (1) An application for an AIS certificate or an amendment thereof, shall be –

- (a) made to the Director on the appropriate form as prescribed by the Director; and
- (b) accompanied by -
 - (i) the manual of procedure referred to in regulation 175.02.1; and
 - (ii) the appropriate fees prescribed in Part 187.

Issuing of certification

- **175.02.6** (1) The Director shall issue an AIS certificate if the Director is satisfied that
 - (a) the applicant meets the requirements prescribed in Subpart 2;
 - (b) the senior personnel of the applicant required by regulation 175.02.3 are fit and competent persons and have never held a senior position in an organisation whose AIS certificate was cancelled by the Director or the Minister; and
 - (c) the granting of the certificate is not contrary to the interests of aviation safety.
- (2) The certificate issued in terms of sub-regulation (1) shall specify the AIS that the certificate holder is authorized to provide.

Period of validity

175.02.7 (1) An AIS certificate shall be valid for a period of one year, calculated from the date of issuing or renewal thereof.

- (2) A certificate shall remain in force until it expires or is suspended or cancelled in terms of these Regulations.
- (3) The holder of a certificate which expires or cancelled, shall, within 30 days from the date on which the approval expires or is cancelled, surrender the certificate to the Director.

Renewal of certificate

- **175.02.8** (1) The holder of an AIS certificate shall at least 60 days immediately preceding the date on which such certificate expires, apply for the renewal of such certificate.
- (2) The provisions of regulation 175.02.5 apply with the necessary changes to an application for the renewal of an AIS certificate.

Duties of holder of certificate

175.02.9 (1) The holder of an AIS certificate shall –

- (a) ensure that their manual of procedure is amended so as to remain current;
- (b) ensure that any amendments made to the holder's manual of procedure meet the applicable requirements of this Part and comply with the amendment procedures contained in the holder's certificate.
- (c) submit to the Director for approval, any amendment to the holder's manual of procedure.
- (2) Where any of the changes referred to in sub-regulation (1) requires an amendment to the certificate, the certificate holder shall forward the certificate to the Director within 28 working days.

Station standing instructions manual

- **175.02.10** (1) The holder of an AIS certificate shall develop a station standing instructions manual which shall
 - (a) set out the procedures for the operation of the AIS concerned; and
 - (b) contain the information as prescribed in SA-CATS 175.
- (2) The holder of an AIS certificate shall provide each AIS unit listed in its manual of procedure with a station standing instructions manual.

Documentation

175.02.11 (1) The holder of an AIS certificate shall provide each AIS unit listed in its manual of procedure with copies of the documentation as prescribed in Document SA-CATS 175.

- (2) The holder shall ensure that -
 - (a) the documentation is reviewed and authorised by appropriate personnel before issue;
 - (b) current issues of relevant documentation are available to personnel at all locations where they need access to such documentation for the provision of the services listed in its manual of procedure referred to in regulation 175.02.1;
 - (c) obsolete documentation is removed from all points of issue or use;
 - (d) changes to documentation are reviewed and approved by appropriate personnel; and
 - (e) the current version of each item of documentation can be identified to preclude the use of obsolete editions.

Continued compliance

175.02.12 (1) The holder of an AIS certificate shall -

- (a) hold at least one complete and current copy of their manual at each office listed in their certificate:
- (b) comply with all procedures and standards detailed in their manual;
- (c) make each applicable part of their manual available to personnel who require those parts to carry out their duties;
- (d) continue to meet the standards and comply with the requirements of Subpart 2 of this Part;
- (e) notify the Director of any change of address for service, telephone number, or facsimile number within 28 days of the change.

SUBPART 3: OPERATING REQUIREMENTS

Provision of AIS

175.03.1 (1) The holder of an AIS certificate shall –

- (a) be responsible for the provision of aeronautical information services to ensure that the information necessary for the safety, regularity or efficiency of air navigation is available in a form suitable for the operational requirements of
 - (i) flight operations personnel including flight crew and the personnel responsible for the provision of pre-flight information; and
 - (ii) providers of air traffic services; and
- (b) publish and distribute the aeronautical information as an IAIP.

Collection of information

175.03.2 The holder of an AIS certificate shall establish procedures to collect, collate and edit the information required for the aeronautical information services listed in their manual of procedure as prescribed in Document SA-CATS 175.

Publication of aeronautical information or IAIP

- **175.03.3** (1) The holder of an AIS certificate shall establish procedures to check, co-ordinate, publish and disseminate aeronautical information for the services listed in the applicant's manual of procedure as prescribed in Document SACATS-AIRS.
- (2) The conditions, requirements, rules, procedures and standards for the publication of aeronautical information in an IAIP shall be prescribed in Document SA-CATS 175.
- (3) The fees for the purchase of the AIP or AIP annual amendment service shall be as prescribed in Part 187.

Pre-flight and post flight information services

- **175.03.4** The holder of an AIS certificate shall make available to flight operations personnel and flight crew members as prescribed in Document SA-CATS 175, aeronautical information that
 - (a) is essential for the safety, regularity and efficiency of air navigation;
 - (b) relates to the geographic area, aerodromes and air routes listed in the certificate holder's manual.

Error correction in published information

175.03.5 The holder of an AIS certificate shall establish procedures to record, investigate, correct, and report any errors that are detected in the aeronautical information published under the authority of their certificate as prescribed in Document SA-CATS 175.

PART 176: ALLOCATION OF RADIO TELEPHONY (RTF) CALL SIGNS, 3-LETTER AIRCRAFT DESIGNATORS AND LOCATION INDICATORS

List of regulations

176.00.1	Applicability
176.00.2	Allocation of RTF call signs and 3-letter aircraft designators
176.00.3	Allocation of location indicators

Applicability

176.00.1 This Part applies to applications for –

- (a) new allocations, changes or deletion of radio telephony call signs and 3-letter aircraft designators; and
- (b) applications for new allocations, changes or deletion of location indicators.

Allocation of Radio Telephony (RTF) call signs and 3-letter aircraft designators

176.00.2 An application for the allocation of RTF call signs and 3-letter designators shall be made to the Director and accompanied by –

- (a) documentary proof of having been issued with an Air Services Licence or an International Air Service Licence in terms of the Air Services Licensing Act, 1990 or the International Air Services Act, 1993, as the case may be;
- (b) the suggested RTF call signs for consideration; and
- (c) the appropriate fee as prescribed in Part 187.

Allocation of location indicators

176.00.3 An application for the allocation of location indicators shall be made to the Director and accompanied by –

- (a) documentary proof of having been issued with an aerodrome licence; and
- (b) the preferred location indicator for consideration.

PART 177: ICAO AERONAUTICAL CHARTS

List of regulations

177.00.1	Applicability
177.00.2	Provision of ICAO aeronautical charts
177.00.3	Minimum standards

Applicability

177.00.1 This Part applies to the provision of ICAO aeronautical charts.

Provision of ICAO aeronautical charts

177.00.2 The Director shall be responsible for the provision of ICAO aeronautical charts in accordance with Document SA-CATS 177.

Minimum standards

177.00.3 The conditions, requirements, rules, procedures and standards for the design, approval and provision of ICAO aeronautical charts, shall be prescribed in Document SA-CATS 177.

PART 185: ENFORCEMENT

List of regulations

185.00.1	Offences
185.00.2	Presumptions and evidence
185.00.3	Administrative monetary penalties
185.00.4	Suspension, cancellation, downgrade or endorsements
185.00.5	Appeal against decisions of authorised officers, authorised persons and inspectors
185.00.6	Appeal against refusal, cancellation, endorsement of medical certification or
	declaration of unfitness
185.00.7	Appeal against decisions of Director

Offences

185.00.1 (1) A person commits an offence if that person –

- (a) hinders or obstructs an authorised officer, inspector or authorised person in the exercising of his or her powers or the performance of his or her duties;
- (b) when called upon by an authorised officer, inspector or authorised person to do so, refuses or fails to give his or her name and address, or gives a false name or address;
- obstructs or impedes any other person acting in the exercising or performance of any privileges, powers or duties conferred on such other person by or under the regulations;
- (d) makes or causes to be made, either orally or in writing
 - (i) any fraudulent, misleading or false statement for the purpose of obtaining any licence, rating, certificate, permit, approval, authorisation, exemption or other document in terms of the regulations;

- (ii) any fraudulent, misleading or false entry in any logbook, record or report which is required to be kept, maintained, made or used to show compliance with any provision of the regulations;
- (e) falsifies, counterfeits, alters, defaces or mutilates, or adds anything to, any licence, rating, certificate, permit, approval, authorisation, exemption or other document issued in terms of the regulations;
- (f) does or causes, or permits to be done or caused, any act contrary to, or who fails to comply with, any provision of the regulations, or a direction given or a prohibition made or a condition imposed in terms thereof;
- (g) exercises a privilege granted by, or uses, any licence, rating, certificate, permit, approval, authorisation, exemption or other document issued under the regulations, of which he, she or it is not the holder;
- (h) unless otherwise authorised in the regulations, permits a licence, rating, certificate, permit, approval, authorisation, exemption or other document issued under the regulations, of which he, she or it is the holder, to be used, or a privilege granted thereby, to be exercised, by any other person;
- (i) operates or attempts to operate any aircraft in respect of which no valid certificate of registration or valid certificate of airworthiness have been issued;
- (j) commits any act, whether by interference with any flight crew member, ATS personnel member or AME, by tampering with any aircraft, or any part thereof, or by disorderly conduct or otherwise, which is likely to endanger the safety of any aircraft or its occupants;
- (k) without the permission of an aerodrome or heliport operator, enters any place within the boundaries of a licensed aerodrome or heliport which has been closed to the public;
- (I) gives false information pertaining to the investigation of any aviation accident or incident; and
- (m) contravenes in any manner the provisions of the Act, and regulations promulgated in terms of the Act which are administered by the Authority.

(2) Any person who -

- (a) contravenes any provision of Part 5 of the Act, except section 111; or
- (b) contravenes or fails to comply with any provision of a safety plan approved by the Minister and whereof the contents have been brought to his or her notice,

is guilty of an offence and shall be liable on conviction to a fine not exceeding R50 000 or imprisonment not exceeding 10 years or to both such fine and imprisonment.

(3) Any aviation participant who fails to comply with section 111 of the Act or fails to comply with the national aviation security program instituted in terms of that section is guilty of an offence and on conviction liable to a fine or to imprisonment for a period not exceeding ten year or to both such fine or imprisonment.

(4) Any person who is convicted of an offence in terms of sub-regulation (1), shall be liable to the penalties prescribed in section 144 of the Act, read with section 332 of the Criminal Procedure Act, 1977 (Act No. 51 of 1977).

Presumptions and evidence

185.00.2 In criminal proceedings under the regulations –

- (a) a written statement purported to be signed by the Director that a licence, rating, certificate, permit, approval, authorisation or exemption, as the case may be, has not been granted or issued to a specific person shall, upon the mere production thereof, be accepted as *prima facie* proof of the facts mentioned therein;
- (b) a document purporting to be a copy of a licence, certificate, permit, approval, authorisation or exemption signed by the Director shall, upon the mere production thereof, be accepted as prima facie proof of the fact that the person whose name appears as the holder of the licence, certificate, permit, approval, authorisation or exemption, as the case may be, on that copy, was the holder of the licence, certificate, permit, approval, authorisation or exemption at the time when the offence was committed
- (c) a document purporting to be an extract certified by the Director or a copy signed by the Director, of any register maintained in terms of the regulations shall, upon the mere production thereof, be accepted as *prima facie* proof of the facts mentioned therein; and
- (d) evidence supplied by the duly designated enforcement officer and obtained by the use of specialised equipment, such as weighing scales, video recorders, small hand-held recording devices, navigation and communication transceivers and secondary equipment, shall be accepted as *prima facie* proof of facts mentioned therein.

Administrative monetary penalties

- **185.00.3** (1) An enforcement officer may assess and impose administrative monetary penalties for offences referred to in regulation 185.00.1.
- (2) The administrative monetary penalty may be a spot fine or a fine following an investigation.
- (3) The following administrative penalties, in respect of the offences referred to in the table below, shall be applicable to individuals in the event of a criminal prosecution not being instituted:

PENALTY: INDIVIDUALS			
REGULATION	1ST OFFENCE	2ND OFFENCE	3RD OFFENCE
185.00.1(1)(a)	R5 000	R10 000	R16 000
185.00.1(1)(b)	R5 000	R10 000	R16 000

185.00.1(1)(c)	R5 000	R10 000	R16 000
185.00.1(1)(d)	R10 000	R20 000	R32 000
185.00.1(1)(e)	R10 000	R20 000	R32 000
185.00.1(1)(f)	R10 000	R20 000	R32 000
185.00.1(1)(g)	R10 000	R20 000	R32 000
185.00.1(1)(h)	R10 000	R20 000	R32 000
185.00.1 (1)(i)	R10 000	R20 000	R32 000
185.00.1(1)(j)	R10 000	R20 000	R32 000
185.00.1(1)(k)	R5 000	R10 000	R16 000
185.00.1(1)(I)	R10 000	R20 000	R32 000
185.00.1(1)(m)	Discretionary	Discretionary	Discretionary

- (4) In the event of a conviction where a criminal prosecution has been instituted in accordance with the table above, the penalties referred to in the table may be used as guidance in determining the appropriate sentence.
- (5) The following administrative penalties, in respect of the offences referred to in the table below, shall be applicable to organisations:

PENALTY: ORGANISATIONS			
REGULATION	1ST OFFENCE	2ND OFFENCE	3RD OFFENCE
185.00.1(1)(a)	R16 000	R32 000	R64 000
185.00.1(1)(b)	R16 000	R32 000	R64 000
185.00.1(1)(c)	R16 000	R32 000	R64 000
185.00.1(1)(d)	R24 000	R48 000	R96 000
185.00.1(1)(e)	R24 000	R48 000	R96 000
185.00.1(1)(f)	R24 000	R48 000	R96 000
185.00.1(1)(g)	R40 000	R80 000	R160 000
185.00.1(1)(h)	R40 000	R80 000	R160 000
185.00.1(1)(i)	R40 000	R80 000	R160 000
185.00.1(1)(j)	R24 000	R48 000	R96 000
185.00.1(1)(k)	R16 000	R32 000	R64 000
185.00.1(1)(I)	R40 000	R80 000	R160 000
185.00.1(1)(m)	Discretionary	Discretionary	Discretionary
185.00.1(2)(a)	R10 000	R20 000	R32 000
185.00.1(2)(b)	R10 000	R20 000	R32 000
185.00.1(3)	R10 000	R20 000	R32 000

- (6) In the event of a conviction where a criminal prosecution has been instituted in accordance with the table above, the penalties referred to in the table may be used as guidance in determining the appropriate sentence.
- (7) An enforcement officer may issue a penalty notice as a spot fine to a suspected offender and such notice must be in the appropriate prescribed form, and shall
 - (a) specify the offence allegedly committed;
 - (b) disclose possible evidence of the alleged offence;
 - (c) specify the reasons for the action taken;
 - (d) specify the rights and obligations arising there from, including time frames; and
 - (e) invite the alleged offender to pay to the Authority the admission of guilt fine as stipulated by the enforcement officer in the penalty notice within 30 (thirty) days of the issue or service of the penalty notice.
- (8) The enforcement officer who has issued a penalty notice for the payment of a spot fine must submit to the Director, within 7 (seven) days after the issue or service of a penalty notice, a written report on the enforcement action taken which report must
 - (a) specify the nature of the alleged offence committed;
 - (b) include possible evidence of the alleged offence;
 - (c) include a copy of the penalty notice issued to the alleged offender;
 - (d) specify the reasons for the action taken; and
 - (e) include proof of service of the penalty notice on the alleged offender.
- (9) An enforcement officer must serve the alleged offender with a notice of intended enforcement action, before issuing and serving a penalty notice for a fine following investigation.
- (10) The notice of intended enforcement action must be served in person, by email or by registered mail, on the appropriate form prescribed, and must
 - (a) specify the alleged offence to be investigated;
 - (b) disclose evidence of the alleged offence;
 - (c) specify the reasons for the action taken;
 - (d) specify the rights and obligations arising there from, including time frames;
 - (e) invite the alleged offender to make representation either orally or in writing on the allegation(s) within 30 (thirty) days of the issue or service of the notice of intended investigation; and
 - (f) provide an opportunity to the alleged offender to obtain assistance in making representations; and
 - (g) specify the administrative action that may follow.
- (11) The enforcement officer must assess all the relevant evidence before him or her and verify with the Legal Division of the Authority prior to issuing a penalty notice.

- (12) The enforcement officer must issue a penalty notice following an investigation if he or she is satisfied that the alleged offender has committed the offence in question.
- (13) An enforcement officer who has issued a penalty notice must submit to the Director within 7 (seven) days after the issue of the penalty notice a written report on the enforcement action taken, as detailed in the penalty notice.
- (14) An enforcement officer must issue within 7 (seven) days of receipt of the representations referred to in sub-regulation (10)(e) to the alleged offender a notice of no further action if he or she is satisfied that the alleged offender has not committed the offence in question.
- (15) If a penalty notice is served on an alleged offender, he or she has a period of 30 (thirty) days within which to pay the monetary penalty specified.
- (16) If an alleged offender pays the monetary penalty as mentioned in sub-regulation (15)
 - (a) any liability of the alleged offender specified in the notice is taken to be discharged;
 - (b) the alleged offender shall not be regarded as having been convicted of the offence.
- (17) A copy of the penalty notice and proof of payment of the penalty must be placed in the official file of the Authority relating to the individual or organisation, as the case may be.
- (18) If payment is made in the form of a cheque, the amount will be regarded as being paid only after the cheque is honoured upon presentation.
- (19) An alleged offender, who feels aggrieved by the penalty notice issued in terms of subregulation (7) or (12), may appeal to the Director against the terms of the penalty notice within 14 days of the issue of penalty notice.
- (20) The enforcement officer must, within 14 days of receipt of the copy of the appeal referred to in sub-regulation (19), deliver his or her written reply to such an appeal to the Director.
- (21) The Director must make a final decision on the appeal in the appropriate form, which decision may include withdrawal, confirmation or amendment of the fine prescribed in the penalty notice.
- (22) If the penalty notice is withdrawn by the Director on appeal, after the alleged offender has paid the monetary penalty, the Director must direct or instruct that the amount paid as the monetary penalty be refunded.
- (23) Nothing in this Part –

- (a) prevents the service of a penalty notice on an individual or organisation for repeating a prescribed offence;
- (b) limits the amount of the fine that may be imposed by a court, subject to its punitive jurisdiction, on an individual or organisation convicted of a prescribed offence; or
- (c) limits the Director in the exercise of any other powers granted to him or her elsewhere in these Regulations.
- (24) The Director or an enforcement officer may serve a penalty notice, a final decision or a notice of no further action
 - (a) on an individual
 - (i) by giving it to the individual personally;
 - (ii) by leaving it at, or by sending it per registered mail to, the address of the place of residence or business of the individual last known to the Director or the enforcement officer;
 - (iii) by giving it, at the place of residence or business of the individual last known to the Director or enforcement officer, to a person who is, or is reasonably believed to be, above the age of 16 years and apparently an occupant of, or employed at the place; or
 - (iv) by sending it to the email address of the individual last known to the Director or the enforcement officer; and
 - (b) on an organisation
 - (i) by sending it per registered mail to the head office, registered office, principal office or other postal address of the organisation;
 - (ii) by giving it to a person who is, or is reasonably believed to be, an officer of, or in the service of the organisation and above the age of 16 years, at the head office, registered office, principal office or other place of business of the organisation; or
 - (iii) by sending it to the email address of the organisation or a representative of the organisation last known to the Director or the enforcement officer.
- (25) The Authority must keep proper records of all enforcement actions taken in terms of this regulation, and retain on the individual's or organisation's file copies of all notices issued, reports written and decisions taken in respect of any alleged offence and any investigation undertaken in terms of this Part.

Suspension, cancellation, downgrade or endorsements

185.00.4 (1) An authorised officer, inspector or authorised person may endorse, suspend, downgrade or vary a registration, certificate, approval, licence or authorisation issued under these Regulations, if –

- (a) immediate endorsement, suspension, downgrade or varying is necessary in the interests of aviation safety;
- (b) an authorised officer, inspector or authorised person is prevented by the holder of the registration, certificate, approval, licence or authorisation from carrying out any safety inspection and audit or from performing any of the functions that the authorised officer, inspector or authorised person is permitted to perform in terms of the Act and these Regulations; or
- (c) it is evident that the holder of the registration, certificate, approval, licence or authorisation does not comply with the relevant requirements prescribed in the Regulations, after such holder has been given at least 14 days within which to comply therewith.
- (2) The notice of endorsement, suspension, downgrade or varying must be given in writing, and must comply with the provisions of section 117 of the Act.
- (3) An authorised officer, inspector or authorised person who has endorsed, suspended, down graded or varied a registration, certificate, approval, licence or authorisation must, within 7 days, submit a report in writing to the Director with a proof that a copy thereof has been submitted to the person concerned, stating the reasons why, in his or her opinion, such registration, certificate, approval or authorisation should be withdrawn or restored.

Appeal against decisions of authorised officers, authorised persons and inspectors

185.00.5. (1) Any aggrieved person or entity whose rights have been detrimentally affected by an administrative action taken by an inspector, authorised officer or authorised person in terms of the Act or in terms of regulation 185.00.4, may, after payment of the fee prescribed in Part 187, appeal against a decision to –

- (a) refuse such person's or entity's application for registration, licence, certificate, approval or authorisation;
- (b) issue, subject to any condition or restriction, such person's or entity's, registration, licence, certificate, approval or authorisation;
- (c) suspend, cancel, endorse, downgrade or vary such person's or entity's registration, licence, certificate, approval or authorisation;
- (d) issue a compliance notice or a refusal to issue a compliance certificate in terms of section 114(1) and (2) of the Act;
- (e) ground an aircraft or close an aviation related facility in terms section 115(1);or
- (f) prohibit the exercising of certain privileges of any aviation certificate, permit or authorisation in terms of section 116(1) of the Act.
- (2) An appeal in terms of subsection (1) must be lodged with the Director within 30 days after the furnishing of reasons for the decision.
- (3) The Director must within three days of receiving such appeal in writing confirm, amend or withdraw the decision.

- (4) The Director must within 14 days furnish written reasons to the appellant for any decision taken in terms of sub-regulation (3).
- (5) Any person aggrieved by a decision taken in terms of sub-regulation (3) may appeal against such decision within five days of receipt of the reasons referred to in sub-regulation (3) to an appeal committee contemplated under section 122 of the Act.
- (6) In adjudicating the appeal contemplated in sub-regulation (3) the Director may afford the appellant—
 - (a) a reasonable opportunity to make representations;
 - (b) the opportunity to present and dispute information and arguments; and
 - (c) the opportunity to appear in person.
- (7) The Director may on good cause shown condone any non-compliance with the time period contemplated in sub-regulation (1).
- (8)(a) If the Director sets aside any decision of an authorised officer, authorised person or inspector, the fees referred to in sub-regulation (1) must be refunded to the appellant.
- (b) If the Director varies any such decision, he or she may direct that the whole or any part of such fees be refunded to the appellant.
- (9) An appeal lodged in terms of this section does not suspend the decision of the authorised officer, authorised person or inspector.

Appeal against refusal, cancellation, endorsement of medical certificate or declaration of unfitness

185.00.6 (1)(a) An applicant for, or the holder of any class of medical certificate who feels aggrieved by—

- (i) a decision by the designated body or institution to cancel his or her medical certificate;
- (ii) a decision by a DAME, declaring him or her unfit or temporarily unfit;
- (iii) any endorsement made by the designated body or institution on his or her medical certificate; or
- (iv) any endorsement made by a DAME on his or her medical certificate, may appeal against such decision or endorsement to the Director on the payment of the fees prescribed in Part 187.
- (b) Such appeal must be lodged on the appropriate form within 60 days—
 - (i) after receipt of the reasons for the decision; or
 - (ii) after or he or she became aware of such decision or endorsement.

- (2) An appeal lodged in terms of this regulation must be considered and decided by the Director assisted by at least two medical practitioners, one of whom must have experience in aviation medicine.
- (3) An appeal lodged in terms of sub-regulation (2) must be considered and decided by the Director within 60 days of receipt thereof.
- (4) After considering an appeal the Director may, in agreement with the medical practitioners, confirm the decision in respect of which the appeal was lodged or give such other decision as the Director and the medical practitioners may consider equitable.
- (5) Any person affected by a decision referred to in sub-regulation (4) may appeal to the appeal committee against the decision.
- (6) The person appealing in terms of sub-regulation (1) is entitled to legal representation.
- (7) The Director may on good cause shown condone any non-compliance with the time period referred to in sub-regulation (1).
- (8) An appeal lodged in terms of this section does not suspend the decision or endorsement in respect of which the appeal is lodged.

Appeal against decisions of Director

185.00.7 (1) Any person or entity aggrieved by a decision taken by the Director referred to in sub-regulation (2) (a) to (e) may file a written appeal with the appeal committee against such decision within 30 days after receipt of the reasons for the decision.

- (2) Any person or entity, as the case may be, may appeal against—
 - (a) a decision or decisions taken in terms of sections 98(5) and 118(3) of the Act;
 - (b) a decision by the Director to—
 - (i) refuse such person's or entity's application for exemption, registration, licence, certificate, approval or authorisation, or to designate one or more persons as inspectors, authorised officers or persons in terms of the Act;
 - (ii) issue, subject to any condition or restriction, such person's or entity's exemption, registration, licence, certificate, approval or authorisation in terms of the Act; or
 - (iii) suspend, cancel, endorse or vary such person's or entity's exemption, registration, licence, certificate, approval or authorisation in terms of the Act;
 - (c) a decision taken in regard to the designation or withdrawal of a designation as inspectors, authorised officers or authorised persons contemplated in section 88(1) of the Act;
 - (d) a decision refusing to lift the grounding order as contemplated in section 115(2) of the Act;
 - (e) any decision taken in terms of section 130 of the Act; or

- (f) the issuance, amendment or withdrawal of technical standards for civil aviation in terms of section 162(1)(a).
- (3) The Director must within 14 days furnish written reasons to the appellant for any decision taken in terms of sub-regulation (2)(a) to (f).

PART 187: FEES AND CHARGES

List of regulations

SUBPART 1: USER FEES

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187.01.27	Fees relating to Part 136
187.01.28	Fees relating to Part 137
187.01.29	Fees relating to Part 138
187.01.30	Fees relating to Part 139
187.01.31	Fees relating to Part 141
187.01.32	Fees relating to Part 145
187.01.33	Fees relating to Part 147
187.01.34	Fees relating to Part 148

187.01.35 187.01.36 187.01.37 187.01.38 187.01.39	Fees relating to Part 149 Fees relating to Part 172 Fees relating to Part 175 Fees relating to Part 176 Hourly rate	
SUBPART	2: PASSENGER SAFETY CHARGE	
187.02.1 187.02.2 187.02.3 187.02.4	Definitions Liability to pay a civil aviation authority passenger safety charge Procedure for payment Data verification procedure	
SUBPART	1: USER FEES	
Fees relatir	ng to Part 11	
187.01.1	The following fees are payable:	R
` ,	an exemption an exemption to be considered within 3 working days of request	1130.00 2 610.00
Fees relatir	ng to Part 21	
187.01.2	The following fees are payable:	R
(a) For a per p	a copy of the register of certificates (regulation 21.01.7(5)),	1.40
(b)(i) For tl	he type certification approval evaluation, per type, for Class I ucts (regulation 21.02.2(1)), per hour	580.00
(ii) For tl	he issuing of a type certificate for Class I products or an andment thereof (regulation 21.02.2(1))	1 410.00
(c)(i) For tl	he type acceptance certification approval evaluation, per type, lass I products (regulation 21.04.2), per hour	580.00
(ii) For tl	he issuing of a type acceptance certificate for Class I products nendment thereto (regulation 21.04.2)	1 410.00
	he issuing of a supplemental type certificate (regulation 21.05.2)	1 020.00
` '	he issuing of a production certificate or an amendment thereof lation 21.07.2)	1 400.00
` , ` ,	he issuing or re-issuing of a standard or restricted certificate of orthiness (regulation 21.08.2(2)), as prescribed in Table 1 below ;	

(ii) For the amendment of a standard or restricted certificate of airworthiness (regulation 21.08.2(2))

660.00

(g) (i) For the issuing of an experimental certificate (regulation 21.08.2(3)) in respect of –

	(aa) (bb)	an aircraft with a maximum certificated mass exceeding 5 700 kg an aircraft with a maximum certificated mass of 5 700 kg or less	2 750.00 1 380.00
(ii)	For th 21.08	ne amendment of an experimental certificate (regulation .2(3))	660.00
(h) (i)	For th	e issuing of a special flight permit (regulation 21.08.5(3))	340.00
(ii)	For th	e amendment of a special flight permit (regulation 21.08.5(3))	120.00
(i) (i) (ii)	For re	ne issuing of a ZA-PMA (regulation 21.09.3(2)) eview of submitted documentation for purposes of issuing MA, per hour	390.00 580.00
(j) (i)	Class	ne issuing of an export airworthiness approval in respect of 1 products (regulation 21.11.2(3)), as prescribed in e 1 below;	
(ii)		ne issuing of an export airworthiness approval in respect of octs other than Class I products (regulation 21.11.2(3))	1 410.00
(k) (i)	For th	e issuing of a ZA-TSO authorisation (regulation 21.12.2(2))	390.00
(ii)		eview of submitted documentation for purposes of issuing ZA-TSO risation, per hour	580.00
(l)		ne issuing of a duplicate of any certificate, approval or authorisation d under Part 21	280.00

TABLE 1

Weight category	Issue/reissue: Certificate of airworthiness/Export airworthiness approval R	Currency fee R
0 – 1 800 kg	3, 690.00	760.00

1 801 – 3 600 kg	4, 610.00	1, 120.00
3 601 – 5 700 kg	5, 520.00	1, 500.00
5 701 – 20 000 kg	7, 360.00	2, 240.00
20 001 – 50 000 kg	11, 060.00	2, 970.00
50 001 kg +	14,730.00	4, 490.00

Fees relating to Part 24

187.01.3	The following fees are payable:	R
(a)	For the issuing of an authority to fly or an amendment thereof (regulation 24.02.2)	200.00
(b)	Currency fee on the anniversary of the authority to fly (regulation 24.02.8)	200.00
Fees relatii	ng to Part 34	R
187.01.4	The following fees are payable:	
(a)	For the issuing of a fuel venting certificate (regulation 34.02.3)	500.00
(b)	For a copy of the register of fuel venting certificates (regulation 34.01.4), per page	1.40
(c)	For the issuing of an engine emissions certificate (regulation 34.03.3)	500.00
(d)	For a copy of the register of engine emissions certificates (regulation 34.01.4), per page	1.40
Fees relation	ng to Part 36	Б
187.01.5	The following fees are payable:	R
(a)	For the issuing of a noise certificate (regulation 36.00.5)	500.00
(b)	For a copy of the register of noise certificates (regulation 36.00.11), per page	1.40

Fees relating to Part 43	Fees	relati	ing to	Part	43
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Fees relating to Part 43			
187.01.6	The following fees are payable:	R	
(a)	For the approval of modifications, repairs and installations on an aircraft (regulation 43.02.15)	420.00	
(b)	For the evaluation of documentation for purposes of an approval of modifications, repairs and installations on an aircraft, per hour (regulation 43.02.15)	580.00	
Fees relat	ing to Part 47	_	
187.01.7	The following fees are payable:	R	
(a)	For registration of an aircraft (regulation 47.00.5(2))	570.00	
(b)	For the amendment of a certificate of registration (regulation 47.00.8)	410.00	
(c)	For the issuing of a duplicate certificate of registration (regulation 47.00.9(2))	410.00	
(d)	For the uplifting of a grounding (regulation 47.00.10(6))	570.00	
(e)	For the cancellation of a certificate of registration (regulation 47.00.11)	570.00	
(f)	For an excerpt from the South African Civil Aircraft Register (regulation 47.00.14(3)), per page	7.20	
(g)	For the allocation of special registration marks (regulation 47.00.3(2))	2 000.00	
(h)	For the re-allocation of aircraft registration marks (regulation 47.00.3(2))	2 000.00	
Fees relat	ing to Part 48	В	
187.01.8	The following fees are payable:	R	
(a)	For the approval of dry lease-in of aircraft (regulation 48.03.1(1))	1 130.00	
(b)	For the approval of wet lease-in of aircraft (regulation 48.03.3(1))	1 130.00	
(c)	For the approval of wet lease-out of aircraft (regulation 48.03.4(4))	1 130.00	

Fees relating to Part 61

i cos iciali	ing to i		R			
187.01.9	The following fees are payable:					
(a)	For validation of the following air crew licences:					
	(i)	Airline transport pilot licence	550.00			
	(ii)	Commercial pilot licence	500.00			
	(iii)	Private pilot licence	340.00			
	(iv)	Airship pilot licence	340.00			
(b)	For a	a copy of the register of pilot licences	210.00			
(c)	For t	the issuing or reissuing of the following air crew licences:				
	(i)	Student pilot licence	370.00			
	(ii)	Private pilot licence	470.00			
	(iii)	Airship pilot licence	470.00			
	(iv)	Commercial pilot licence	510.00			
	(v)	Airline transport pilot licence	560.00			
(d)	For t	For the issuing or reissuing of any rating that will be reflected on a licence:				
	(i)	Instructor rating:				
		Category A & B for Aeroplane and Helicopter	390.00			
	(ii)	Other ratings	240.00			
	(iii)	Any authorisation or approval pertaining to a licence	240.00			
(e)		examinations provided by the Director in respect of any pilot nce or rating, per subject:				
	(i)	On-line PPL examinations	70.00			
	(ii) (iii)	All other on-line examinations Out-station (hand written) examinations	240.00 350.00			
	` ,					
(f)		the remarking of examinations by the Director in respect of pilot licence or rating, per subject	350.00			
(g)	For t	the issuing of the following duplicate pilot licences:				
	(i)	Student pilot licence	290.00			
	(ii)	Private pilot licence	330.00			
	(iii)	Airship pilot licence	330.00			
	(iv)	Commercial pilot licence	500.00			

	(v)	Airline transport pilot licence	550.00
(h)	h) For the annual currency of the following air crew licences:		
	(i)	Student pilot licence	320.00
	(ii)	Private pilot licence	340.00
	(iii)	Airship pilot licence	340.00
	(iv)	Commercial pilot licence	370.00
	(v)	Airline transport pilot licence	420.00
(i)		he initial designation and the renewal thereof in respect of the folloniners:	owing
	(i) (ii)	Flight examiner Radio telephone operator examiner	1 040.00 810.00
(j)	For tl	he monitoring of the process of Flight instructor Grade 1 upgrade	1 040.00
Fees relatir	ng to P	Part 62	R
187.01.10	The f	following fees are payable:	
		3	
(a)		ralidation of the following foreign air crew licences:	
(a)			340.00 340.00 340.00 340.00 340.00
(a) (b)	(i) (ii) (iii) (iv) (v)	walidation of the following foreign air crew licences: Weight shift controlled microlight pilot licence Conventionally controlled microlight pilot licence Light Sport aeroplane pilot licence Gyroplane pilot licence	340.00 340.00 340.00
	(i) (ii) (iii) (iv) (v)	ralidation of the following foreign air crew licences: Weight shift controlled microlight pilot licence Conventionally controlled microlight pilot licence Light Sport aeroplane pilot licence Gyroplane pilot licence Touring motor glider pilot licence	340.00 340.00 340.00
	(i) (ii) (iii) (iv) (v) For th (i) (ii) (iii) (iv) (v) (vi)	ralidation of the following foreign air crew licences: Weight shift controlled microlight pilot licence Conventionally controlled microlight pilot licence Light Sport aeroplane pilot licence Gyroplane pilot licence Touring motor glider pilot licence he issuing or reissuing of the following air crew licences: National pilot learner licence Weight shift controlled microlight pilot licence Conventionally controlled microlight pilot licence Light sport aeroplane pilot licence Gyroplane pilot licence	340.00 340.00 340.00 340.00 370.00 370.00 370.00 370.00 370.00

	(ii) (iii)	Other ratings Part 96 Authorisation	240.00 500.00	
(d) For examinations provided by the desi any pilot licence or rating:		examinations provided by the designated body in respect of bilot licence or rating:		
	(i) (ii)	On-line (new licence) Online (Category conversion)	200.00 100.00	
(e)	For t			
	(i) (ii) (iii) (iv) (v) (vi)	National pilot learner licence Weight shift controlled microlight pilot licence Conventionally controlled microlight pilot licence Light sport aeroplane pilot licence Gyroplane pilot licence Touring motor glider pilot licence	320.00 290.00 290.00 290.00 290.00 290.00	
(f)	(f) For the issuing of the following duplicate pilot licences:			
	(i) (ii) (iii) (iv) (v) (vi)	National pilot learner licence Weight shift controlled microlight pilot licence Conventionally controlled microlight pilot licence Light sport aeroplane pilot licence Gyroplane pilot licence Touring motor glider pilot licence	290.00 290.00 290.00 290.00 290.00	
(g)	For the initial designation and review thereof in respect of the following examiners:			
	(i) (ii)	Flight examiner Radio telephone operator examiner	810.00 810.00	
Fees relati	ng to P	Part 63	R	
187.01.11	The f	following fees are payable:		
(a)	For v	alidation of a flight engineer licence	500.00	
(b)	For a	a copy of the register of flight engineer licences	210.00	
(c)	For t	he issuing or reissuing of a flight engineer licence	500.00	
(d)		he issuing or reissuing of the following ratings that will be cted on flight engineer licences:		
	(i)	Flight engineer instructor rating	390.00	
			1050	

	(ii) Other	240.00		
(e)	For examinations provided by the Director in respect of any flight engineer licence or rating, per subject —			
	(i) On-line (ii) Out-station	240.00 350.00		
(f)	For remarking of examinations in respect of any flight engineer licence or rating, per subject	340.00		
(g)	For the issuing of a duplicate flight engineer licence	500.00		
(h)	For the annual currency of a flight engineer licence	310.00		
(i)	For the designation of a flight engineer examiner (annually)	790.00		
Fees relatir	ng to Part 64	R		
187.01.12	7.01.12 The following fees are payable:			
(a) (b) (c)	For a copy of the register of cabin crew member licences For the issuing or reissuing of a cabin crew member licence For examinations provided by the Director in respect of any cabin crew member licence or rating, per subject —	210.00 310.00		
	(i) On-line (ii) Out-station	240.00 350.00		
(d)	For remarking of examinations in respect of any cabin crew member licence or rating, per subject	340.00		
(e)	For the issuing of a duplicate cabin crew member licence	310.00		
(f)	For the annual currency of a cabin crew member licence	240.00		
(g)	For the designation of a cabin crew member examiner (annually)	790.00		
(h)	For the validation of a cabin crew member licence or equivalent Document	470.00		
Fees relatir	ng to Part 65	R		
187.01.13	The following fees are payable:			

(a) (b) (c) (d) (e) (f) (g)	For the conversion of a foreign air traffic service licence or rating For a copy of the register of air traffic service licences For the issuing or reissuing of an air traffic service licence For an addition of a rating to an air traffic service licence For endorsement of an air traffic service licence For the issuing of a duplicate air traffic service licence For the currency of an air traffic service licence	610.00 140.00 500.00 250.00 250.00 500.00 310.00
Fees relation	ng to Part 66	R
187.01.14	The following fees are payable:	
(a) (b) (c) (d)	For the validation of an aircraft maintenance engineer licence For a copy of the register of aircraft maintenance engineer licences For the issuing or reissuing of an aircraft maintenance engineer licence For amendment of or addition to an aircraft maintenance engineer	570.00 210.00 570.00
(e) (f) (g)	licence For the renewal of an aircraft maintenance engineer licence For the issuing of a duplicate aircraft maintenance engineer licence For the writing and remarking of examinations in respect of any aircraft	350.00 580.00 580.00
(b)	maintenance engineer licence or rating, per subject For the issuing of a letter of confirmation of an aircraft maintenance engineer experience/qualifications to interested parties	340.00 610.00
(i)	For the designation of an aircraft maintenance engineer examiner (annually)	750.00
Fees relation	ng to Part 67	R
187.01.15	The following fees are payable:	
(a) (b)	For appeal against being found medically unfit For designation of the following medical examiners:	1 700.00
	(i) Senior examiner (ii) Regular examiner	780.00 390.00
(d)	For the designation of a medical cabin crew examiner For other services to be provided, per hour	730.00 580.00
Fees relatir	ng to Part 68	R
187.01.16	The following fees are payable:	N

(a)	For the issuing or reissuing of the following air crew licences:			
	(i)	Glider pilot licence	370.00	
	(ii)	Commercial glider pilot licence	370.00	
(b)	For v	validation of the following foreign air crew licences:		
	(i)	Glider pilot licence	340.00	
(c)	For is	ssuing of duplicates of the following licences:		
	(i)	Glider pilot licence	290.00	
	(ii)	Commercial glider pilot licence	290.00	
(d)	For t	he annual currency of the following air crew licences:		
	(i)	Glider pilot licence	290.00	
	(ii)	Commercial glider pilot licence	290.00	
(e)		he issuing issuing or reissuing of any rating that will be reflected licence:		
	(i)	Instructor rating: Category A & B for Aeroplane and Helicopter	370.00	
	(ii)	Other ratings	240.00	
	(iii)	Any authorisation or approval pertaining to a licence	240.00	
(f)	For t	he issuing of the following duplicate pilot licences:		
	(i)	Student pilot licence	290.00	
(h)	For t	he annual currency of the following air crew licences:		
	(i)	Student pilot licence	320.00	
Fees relatir	ng to P	Part 69	_	
187.01.17	The f	following fees are payable:	R	
(a)	For t	he issuing or reissuing of the Free balloon pilot licence	470.00	
(b)	For v	validation of the Free balloon pilot licence	340.00	
(c)	For is	ssuing of duplicates of the Free balloon pilot licence	330.00	
(d)	For t	he annual currency of the Free balloon pilot licence	340.00	

Fees relating to Part 91				
		K		
187.01.18	The following fees are payable:			
(a) (b)	For the issuing of a duplicate mass and balance report For the issuing of a duplicate flight manual approval	480.00 330.00		
(c)	For the issuing of a duplicate aircraft equipment list For the issuing or reissuing of Reduced Vertical Separation Minima certificate	480.00 480.00		
(e)	For the issuing or reissuing of Minimum Navigation Performance Specification certificate	330.00		
(f)	For the issuing or reissuing of FM Immunity certificate	320.00		
(g) (h)	For the issuing or reissuing of area navigation certificate For the issuing or reissuing of transponder binary / decimal /	340.00		
, ,	hexadecimal codes	250.00		
(i)	For the issuing or reissuing of a certificate of permission to import an aircraft	340.00		
Fees relatir	ng to Part 92	В		
		R		
187.01.19	The following fees are payable:			
(a)	For an exemption in terms of regulation 92.00.3	1 130.00		
(b)	For an exemption to be considered within 3 working days of request	2 610.00		
(c)	For the validation of a foreign certificate issued for the handling of goods to be conveyed by air in terms of regulation 92.00.9	300.00		
(d)	For the issuing of dangerous goods approval	870.00		
Fees relatir	ng to Part 105			
		R		
187.01.20	This fee is payable for the authorisation of a parachute jump	180.00		
Fees relatir	ng to Part 108	R		

187.01.21

(a)

(b)

(1)

The following fees are payable:

For the initial issue of certificate of approval For the renewal of certificate of approval

R 3 000.00 1 500.00

	(c) (d) (e) (f)	For the validation of certificate of approval For the validation of training certificate For an amendment to a security manual, per page For an extract of the register of certificates of approval	1 500.00 100.00 12.50 50.00
(2)	The f	following fees are payable per site in respect of prescribed inspections:	
	(a) (b) (c)	Sites up to 1 000m ² Sites in excess of 1 000m ² up to and including 5 000m ² Sites exceeding 5 000m ²	1 000.00 1 400.00 1 800.00
(3)		following fees are payable in respect of the initial approval of a rity manual:	
	(a) (b) (c)	Per manual consisting of 100 or less pages Per manual consisting of 101 to 200 pages Per manual consisting of more than 200 pages	1 000.00 2 000.00 5 000.00
Fees relating to Part 109			
187.01.22 The following fees are payable:			
	(a) (b) (c) (d) (e)	For a copy of the register of aviation security training organization approvals For the issuing of an aviation security training organization approval For an amendment of an aviation security training organization approval For the renewal of an aviation security training organization approval For the issuing of an aviation security training organization temporary approval to conduct aviation security training	180.00 2 050.00 1 010.00 1 070.00 480.00
Fees	relatii	ng to Part 110	R
187.0	1.23	The following fees are payable:	
	(a) (b) (c) (d) (e) (f)	For the issuing of an aviation security screener certificate For the reissuing of an aviation security screener certificate For the issuing of a duplicate aviation security screener certificate For the designation as an aviation security screener examiner (annually) For a copy of the register of security screeners certificates For examination provided by the Director in respect of aviation security screener certification, per subject:	260.00 260.00 180.00 660.00 180.00

	(i) On-line(ii) At Authority examination centre	210.00 290.00
(g)	For the remarking of examination in respect of an aviation security screener certificate, per subject	280.00
(h)	For the annual recertification of a security screener	210.00
(i)	For the validation of an aviation security screener certification or equivalent document	390.00
Fees relatin	g to Part 121	
		R
187.01.24	(1) The following fees are, subject to the provisions of sub-regulation (2), payable:	
(a)	For the issuing of an operating certificate in terms of regulation 121.06.2 for aeroplanes in the certificated mass class of —	
	()	13 090.00 16 380.00
		19 660.00
(b)	For each aeroplane placed on the operating certificate in the mass classes referred to below –	
	(i) 5 701 kg - 20 000 kg	1 290.00
	(ii) 20 001 kg - 130 000 kg (iii) Greater than 130 000 kg	1 430.00 2 870.00
(c)	For the renewal of an operating certificate referred to in paragraph (a) above in respect of aeroplanes in the certificated mass class of –	
	()	11 990.00
	\	15 950.00 19 910.00
(d)	For the placing of each aeroplane on the renewed operating certificate, the fees referred to in paragraph (b) above	
(e)	For a copy of the register of operating certificates in respect of Part 121	143.00
(f)	For the issuing of a certificate of approval for an operations manual in respect of Part 121	5 610.00
(g)	For the approval of the following amendments to an operations manual in respect of Part 121:	

	(i) A text or content amendment, per page(ii) A name or numbering change, per page		1.40 2.90		
	(h)	For th	e removal of an aeroplane from the certificate of approval	150.00	
	(2) Where an application for an operating certificate or an application for a renewal thereof relates to more than one aeroplane, the fee payable is in respect of an aeroplane in the highest all-up certificated mass class applicable to Part 121.				
Fees	relatin	g to Pa	art 127	R	
187.0	1.25	(1)	The following fees are, subject to the provisions of sub-regulation payable:	(2),	
	(a)		e issuing of an operating certificate in terms of regulation 127.06.2 pters in the certificated mass class of —	? for	
		(i) (ii) (iii)	Less than 1 500 kg 1 500 kg - 5 700 kg Greater than 5 700 kg	7 050.00 8 420.00 11 090.00	
	(b)	For each helicopter placed on the operating certificate in the mass classes referred to below –			
		(i) (ii) (iii)	Less than 1 500 kg 1 500 kg - 5 700 kg Greater than 5 700 kg	1 060.00 1 340.00 1 500.00	
	(c)	For renewal of an operating certificate referred to in paragraph (a) above in respect of helicopters in the certificated mass class of –			
		(i) (ii) (iii)	Less than 1 500 kg 1 500 kg - 5 700 kg Greater than 5 700 kg	4 310.00 5 750.00 8 610.00	
	(d)		e placing of each aeroplane on the renewed operating certificate, es referred to in paragraph (b) above		
	(e)	For a	copy of the register of operating certificates in respect of Part 127	140.00	
	(f)		e issuing of a certificate of approval for an operations manual sect of Part 127	5 590.00	
	(g)		e approval of the following amendments to an operations al in respect of Part 127:		
		(i)	A text or content amendment, per page	1.40	

	(ii) A name or numbering change, per page	2.90
(h)	For the removal of a helicopter from the certificate of approval	1.50

(2) Where an application for an operating certificate or an application for a renewal thereof relates to more than one helicopter, the fee payable is in respect of a helicopter in the highest all up certificated mass class applicable to Part 127.

Fees relating to Part 135

R

187.01.26 The following fees are payable:

(a) For the issuing of an operating certificate in terms of regulation 135.06.2 for aeroplanes with a maximum certificated mass of 5 700 kg or less
 (b) For each aeroplane placed on the operating certificate in the class

8 470.00

referred to in paragraph (a) above

1 460.00

(c) For renewal of an operating certificate referred to in paragraph (a) Above

5 800.00

(d) For the placing of each aeroplane on the renewed operating certificate, the fees referred to in paragraph (b) above

1 460.00

(e) For a copy of the register of operating certificates

140.00

(f) For the issuing of a certificate of approval for an operations manual in respect of Part 135

6 530.00

(g) For the approval of the following amendments to an operations manual in respect of Part 135:

(i)	A text or content amendment, per page
(ii)	A name or numbering change, per page

1.40 2.90

(h) For the removal of an aeroplane from the Certificate of Approval

150.00

Fees relating to Part 136

R

187.01.27 The following fees are payable:

(a)	For the initial issuing of an operating certificate	3 500.00
(b)	For each additional balloon placed on an operating certificate	605.00

(c) (d) (e) (f)	For t For a	For the renewal or variation of an operating certificate For the renewal in respect of each additional balloon For a copy of register of operating certificates For an approval of the following amendments to an operations manual in respect of Part 136:	
	(i) (ii)	A text or content amendment, per page A name or numbering change, per page	1.40 2.90
(g)	For t	he removal of a balloon from the register of operating certificates	150.00

Fees relating to Part 137

R

187.01.28 The following fees are payable:

(a) For an operating certificate prescribed by regulation 137.01.3 to be issued for Part 121, Part 127 or Part 135, as the case may be, the fees shall be as prescribed by the appropriate Part.

Fees relating to Part 138

R

187.01.29 The following fees are payable:

(a) For an operating certificate prescribed by regulation 138.01.2 to be issued for Part 121, Part 127 or Part 135, as the case may be, the fees shall be as prescribed by the appropriate Part.

Fees relating to Part 139

187.01.30 (1) The fees reflected in **Table 2** below are payable for the services reflected therein.

TABLE 2

	Fire services, Security and Dangerous Goods				
Cat	National Aerodromes	International Aerodromes	Infrastructure	Lighting (Relevant	Instrumentation (Relevant to all the categories
	R R		R	categories listed in	listed in the Table)

				the Table	
					R
1	530.00	3, 940.00	260.00	Instrument RWS:	VOR: 1 280.00
2	1, 970.00	7, 920.00	260.00	R2.40/metre	ILS: 1 510.00
3	3, 830.00	11,540.00	550.00	Non- Instrument	NDB: 410.00
4	6, 640.00	17, 860.00	1, 250.00	RWS:	PAPI (Audit): per set
5	8, 590.00	23, 180.00	1, 460.00	R1.20/metre	770.00
6	9, 800.00	26, 260.00	2, 920.00		PAPI (Calibrate): per set
7	30, 560.00	52, 790.00	8, 750.00		1 510.00
8	67, 380.00	137, 250.00	20, 650.00		VHF Spectrum:
9	137, 920.00	264, 900.00	27, 540.00		990.00
10	220, 500.00	418. 750.00	44, 070.00		

(2)	The following fees are payable:		R
	(a)	For a copy of the register of aerodrome licences, heliport approvals and heliport licences (regulation 139.01.6(5)), per page	1.40
	(b)	For the issuing of a licence of intent (regulation 139.02.18(2))	4 290.00
	(c)	For the issuing of a heliport licence (regulation 139.03.10)	3 630.00
	(d)	For the renewal of a heliport licence (regulation 139.03.17(1))	3 630.00
	(e)	For the approval and renewal of a helistop	3 630.00
	(f)	For the issuing of an approval for the erection of a cellular	
	, ,	telephone mast or any other obstacle	650.00

Fees relating to Part 141

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187.01.31 The following fees are payable:

(a) (b)	For a copy of the register of aviation training organisation approvals For the issuing of an aviation training organisation approval	210.00 2 840.00
(c)	For an amendment of an aviation training organisation approval	1 180.00
(d)	For the renewal of an aviation training organisation approval	1 290.00

(e) (f)	For the issuing of a temporary aviation training organisation approval For a copy of the register of operating certificates in respect of Part 141				
(g)	For the listing of the following aircraft type (as defined in Subpart 13 of Part 61) in the Operations Manual in respect of Part 141:				
	(i) aircraft with a maximum certificated mass of 5,700 kg or more (ii) aircraft with a maximum certificated mass of less than 5,700 but more than 2,700 kg				
	(iii) aircraft with a maximum certificated mass of less than 2,700.00 kg	525.00			
(h)	(h) For the approval of the following amendments to an operations manua respect of Part 141:				
	 (i) A text or content amendment, per page (ii) A name or numbering change, per page (iii) For the temporary addition of an aircraft or instructor in the operations manual for temporary training approval 	1.40 2.90			
	per amendment	225.00			
Fees relating to Part 145					
		R			
187.01.32	(1) The following fees are payable for services rendered within th South Africa:				
187.01.32 (a) (b)	• • • • • • • • • • • • • • • • • • • •				
(a)	South Africa: For a copy of the register of aircraft maintenance organisation approvals (regulation 145.01.10 (5)), per page	1.40 1.510.00 580.00			
(a) (b)	South Africa: For a copy of the register of aircraft maintenance organisation approvals (regulation 145.01.10 (5)), per page For the issuing of an aircraft maintenance organisation approval: (i) Per application (ii) The hourly rate for inspection time	1.40 1.510.00 580.00			
(a) (b)	South Africa: For a copy of the register of aircraft maintenance organisation approvals (regulation 145.01.10 (5)), per page For the issuing of an aircraft maintenance organisation approval: (i) Per application (ii) The hourly rate for inspection time For the amendment of an aircraft maintenance organisation approva	1.40 1.510.00 580.00 1 650.00 700.00 580.00			
(a) (b) (c) (d)	South Africa: For a copy of the register of aircraft maintenance organisation approvals (regulation 145.01.10 (5)), per page For the issuing of an aircraft maintenance organisation approval: (i) Per application (ii) The hourly rate for inspection time For the amendment of an aircraft maintenance organisation approva For the renewal of an aircraft maintenance organisation approval: (i) Per application (ii) Per application (iii) The hourly rate for inspection time	1.40 1.510.00 580.00 1 650.00 700.00 580.00			

	(b)	For the renewal of an aircraft maintenance organisation approval, the hourly rate for inspection time	110.00		
Fees relating to Part 147					
187.01.33	The f	ollowing fees are payable:			
(a)		copy of the register of design organisation approvals lation 147.01.6(5)), per page	1.40		
(b)(i)	For the issuing of a design organisation approval to design products or changes thereto (regulation 147.02.6) For the amendment of a design organisation approval to		3 530.00		
, ,	desig	130.00			
(c)	For the renewal of a design organisation approval to design products or changes thereto (regulation 147.02.15(1))		280.00		
(d)(i)		ne issuing of a design organisation approval to design and appliances or changes thereto (regulation 147.03.6)	3 530.00		
(ii)		ne amendment of a design organisation approval to design parts appliances or changes thereto (regulation 147.03.6)	130.00		
(e)		ne renewal of a design organisation approval to design parts appliances or changes thereto (regulation 147.03.14(1))	280.00		
(f)	For th	ne issuing of a duplicate design organisation approval	150.00		
Fees relating to Part 148					
187.01.34	The fo	ollowing fees are payable:			
(a)		copy of the register of manufacturing organisation ovals (regulation 148.01.8(5)), per page	1.40		
(b)(i)		ne issuing of a manufacturing organisation approval lation 148.02.2)	3 530.00		
(ii)		ne amendment of a manufacturing organisation approval lation 148.02.2)	140.00		
(c)	(regu	ne renewal of a manufacturing organisation approval lation 148.02.2) ne issuing of a duplicate manufacturing organisation approval	280.00 150.00		

(e) (f)	For each additional rating (per application) For the inspection of an organisation for issuance of a Certificate	1 410.00			
	of Approval per hour per inspection	580.00			
(g)	For the annual currency of a Certificate of Approval (regulation 148.02.14)	340.00			
(h)	For the annual inspection in respect of continued approval per hour per inspection	580.00			
Fees relating to Part 149					
187.01.3	The following fees are payable:	R			
(a)	For a copy of the register of aviation recreation organisation approvals (regulation 149.01.7(5), per page	1.40			
(b)	(regulation 149.02.6)	3 520.00			
	(ii) For the amendment of an aviation recreation organisation approval (regulation 149.02.6)	130.00			
(c)	For the renewal of an aviation recreation organisation approval (regulation 149.02.12(1))	550.00			
(d) For the issuing of a duplicate aviation recreation organisation		150.00			
Fees relating to Part 172					
		R			
187.01.3	The following fees are payable:				
(a)	For a copy of the register of air traffic service unit approvals (regulation 172.01.7(5)), per page	1.40			
(b)		2 510 00			
((regulation 172.03.5) For the amendment of an air traffic service unit approval (regulation 172.03.5)	3 510.00 80.00			
(c)	For the renewal of an air traffic service unit approval	0.540.00			
	(regulation 172.03.9(1))	3 510.00			
(d)	For the issuing of a duplicate air traffic service unit approval	110.00			
(e)	For the approval of:				

(i)	Aerodrome control service	16 800.00
(ii)	Approach control service	20 760.00
(iii)	Area control service	20 760.00
(iv)	Flight information service	20 760.00
(v)	Approach surveillance service	34 570.00
(vi)	Area surveillance service	34 570.00
(vii)	Aerodrome flight information service	5 170.00

Fees relating to Part 175

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187.01.37 The following fees are payable:

- (a) For a copy of the South African Aeronautical Information
 Publication (regulation 175.00.2(a) excl postage) 470.00
- (b) For subscribing to the South African Aeronautical Information
 Publication annual amendment service (regulation 175.00.3(3)) 340.00

Fees relating to Part 176

R

187.01.38 The following fees are payable:

(a) For a radio telephony call sign (regulation 176.00.2) 390.00

Hourly rate

- **187.01.39** (a) For services that are provided by the Authority in South Africa for which no specific fee has been set out in this Part, the following hourly rate is applicable: 580.00
 - (b) For services that are provided by the Authority outside South Africa for which no specific fee has been set out in this Part, the following hourly rate is applicable: 110.00

SUBPART 2: CIVIL AVIATION AUTHORITY PASSENGER SAFETY CHARGE

Liability to pay civil aviation authority passenger safety charge

187.02.1 (1) A civil aviation authority passenger safety charge amounting to R16.00 shall be payable by aircraft passengers departing on an aircraft from an aerodrome within the Republic of South Africa on a scheduled public air transport flight or part of a flight to a destination within or outside the territory of the Republic of South Africa.

- (2) The civil aviation authority passenger safety charge shall be included in the price payable in respect of the air ticket concerned.
- (3) Value Added Tax is not payable on the civil aviation authority passenger safety charge.

Procedure for payment

- **187.02.2** (1) The civil aviation authority passenger safety charge becomes due to the Authority by an operator on the departure of a flight as contemplated in regulation 187.02.2(1).
- (2) The operator shall pay, directly to the Authority, the civil aviation authority passenger safety charge, collected over a period of a calendar month, within twenty-one (21) days after the last day of the month to which the collected charge relates.
- (3) The payment referred to in sub-regulation (2) shall be accompanied by a duly completed return prescribed form.

Data verification procedure

- **187.02.3** (1) Information relating to the total number of departing passengers per operator on domestic and international flights, as contemplated in regulation 187.02.2, shall be provided monthly
 - (a) by the Airports Company Limited of South Africa, in respect of flights departing from aerodromes owned or controlled by the said Company; and
 - (b) by the relevant aerodrome licence holder or aerodrome operator in respect of flights departing from aerodromes not owned or controlled by the said Company.
- (2) The Authority shall, on receipt of the information referred to in sub-regulation (1), verify the accuracy and completeness of data received from the operators involved.
- (3) Interest at a rate of 2% above prime lending rate per annum, compounded monthly, is payable in respect of the outstanding balance of any civil aviation authority passenger safety charge after the due date.
- (4) The operators of the relevant air services will be subjected to a compliance audit as instructed or done by the Authority at any period determined by the Authority.

PART 188: ADMINISTRATION

List of regulations

188.00.1 Repeal of regulations

188.00.2 Savings and transitional provisions

Repeal of regulations

- **188.00.1** The following Regulations are hereby repealed:
 - (a) Civil Aviation Regulations, 1997;
 - (b) Civil Aviation Authority Regulations, 2007;
 - (c) The Civil Aviation Security Regulations, 2011;
 - (d) Part 187 of the Civil Aviation Regulations, 2011;
 - (e) The remaining provisions of the Air Navigation Regulations, 1976; and
 - (f) The remaining provisions of the Rules of the Air, Air Traffic Services, Search and Rescue and Overflight Regulations, 1975.

Savings and transitional provisions

- **188.00.2** (1) Subject to these Regulations, any licence, authorisation, registration, certificate, permission, approval, decision, exemption, direction, order, suspension, determination or condition issued, given, granted, made or imposed under any provision of the Regulations repealed by regulation 188.00.1, and any other act or thing performed, done or omitted under such a provision is regarded as having been issued, given, granted, made, imposed, done or omitted under the corresponding provision of these Regulations.
- (2) As from the date of commencement of these Regulations, any person who is the holder of a Level 3 certificate issued in terms of regulation 108.06.1 of the Civil Aviation Regulations, 1997, is deemed to be the holder of a Level 2 certificate until the expiry date of such certificate.

Short title and commencement

188.00.3 These Regulations are called the Civil Aviation Regulations, 2011, and shall come into operation two months after the date of publication in the Government Gazette.