Compliance List Operators Manual Part B

Note: This compliance list is based on Regulation (EU) No. 965/2012 ("Air Operations")

Operator´s name and address: Mali Air Luftverkehr GmbH Reitbach 22 A 8763 Möderbrugg		Operator's AOC number: A-050	
Revision no.:		Revision date:	
List created by *(competent person assigned by the operator)*: Christian Waldbott Bassenheim (FBL)	Date:	List checked by *(person checking the list on behalf of the compliance management system of the operator)*: Michael Pühse (CM)	Date:
Accountable Manager (name/signature): Karl Heinz Mali		Nominated Person for managing and supervising flight operations (name/signature): Christian Waldbott Bassenheim (FBL)	
(For Authority use only) Austro Control POI:		*(For Authority use only)* Remarks:	*(For Authority use only)*

Content of the compliance list:

A compliance list is a tool designed for the preparation and approval of any part of the operations manual (including MEL). For those areas for which a specific approval is required (SPA), separate lists have been created.
Each line contains predefined references to one or more paragraph(s) of the applicable regulation (or AMC material). The user shall insert the reference of the relevant part of the operations manual concerned.

> Note: For the purpose of providing cross reference information during the transition period from EU-OPS to Air Operations, the references to both regulations are listed. However, the operator shall refer to the relevant Air Operations paragraph only. After 28 October 2014 the EU-OPS reference will be removed.

This list can be edited by the operator in writing or electronically (preferred). When finished, the operator shall send the completed version to Austro Control for further processing.

Respective legal reference column:
This column lists the relevant legal paragraph.

Requirement column:
This column provides the user with the implementing rule for each required section. Whenever the remark "refer to rule" is mentioned the user has to consult the Air Operations regulation. (This procedure is necessary when the respective rule is to extensive for publication in this compliance list.)

Manual reference column:
Different procedures shall be applied for an initial issue or a revision of an OM. These procedures are as follows:

Initial issue of an OM:
All references in regard to the respective Air Operations paragraph(s) shall be listed in this column.
If an Air Operations paragraph is not relevant, the remark *N/A* shall be inserted in the relevant reference field. Therefore, all lines must have a remark either stating the OM reference or *N/A*, as applicable.

Revision of an OM:
All references in regard to the respective Air Operations paragraph(s) shall be listed in this column. However, all lines not affected by the revision shall be left blank!

App/Acc column:
This column reminds the operator whether an Authority acceptance (**AC**) or an Authority approval (**AP**) is required.

Remarks column:
This column is for Authority use only. The operator may put remarks directly into the **Manual reference** column.

Doc Stat column (Austro Control use only):
√ Operator's OM is in compliance with the relevant paragraph(s)
N Operator's OM is **not** in compliance with the relevant paragraph(s)
N/A Not applicable for the relevant Operator / Operation

This compliance list is a tool and does not replace a thorough study of official regulations.

Please help us to continuously improve the quality of this list. If you detect any error or deficiency mail to ops@austrocontrol.at.

Continue with checklist on next page.

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 0	**GENERAL INFORMATION AND UNITS OF MEASUREMENT**				
1.1040 (c)	Unless otherwise approved by the Authority, or prescribed by national law, an operator must prepare the Operations Manual in the English language. In addition, an operator may translate and use that manual, or parts thereof, into another language.		AP		N/A
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Operations Manual Part B are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.	OM-A 1. 1.1.1			OK
1.1045 (b) and (c) ORO.MLR.101	An operator shall ensure that the contents of the Operations Manual Part B are in accordance with Appendix 1 to OPS 1.1045 and relevant to the area and type of operation. An operator shall ensure that, the detailed structure of the Operations Manual is acceptable to the Authority. (a) The operator shall establish an operations manual (OM) as specified under 8.b of Annex IV to Regulation (EC) No 216/2008. (b) The content of the OM shall reflect the requirements set out in this Annex, Annex IV (Part-CAT) and Annex V (Part-SPA), as applicable, and shall not contravene the conditions contained in the operations specifications to the air operator certificate (AOC). (c) The OM may be issued in separate parts. (d) All operations personnel shall have easy access to the portions of the OM that are relevant to their duties. (e) The OM shall be kept up to date. All personnel shall be made aware of the changes that are relevant to their duties. (f) Each crew member shall be provided with a personal copy of the relevant sections of the OM pertaining to their duties. Each holder of an OM, or appropriate parts of it, shall be responsible for keeping their copy up to date with the amendments or revisions supplied by the operator.(g) For AOC holders: (1) for amendments required to be notified in accordance with ORO.GEN.115(b) and ORO.GEN.130(c), the operator shall supply the competent authority with intended amendments in advance of the effective date; and (2) for amendments to procedures associated with prior approval items in accordance with ORO.GEN.130, approval shall be obtained before the amendment	OM-A 1. 1.1.1 1.1.2	AC		N

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	effective. (h) Notwithstanding (g), when immediate amendments or revisions are required in the interest of safety, they may be published and applied immediately, provided that any approval required has been applied for. (i) The operator shall incorporate all amendments and revisions required by the competent authority. (j) The operator shall ensure that information taken from approved documents, and any amendment thereof, is correctly reflected in the OM. This does not prevent the operator from publishing more conservative data and procedures in the OM. (k) The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles				
1.1045 Appendix 1 A 0.1 (d) AMC3 ORO.MLR.100	Explanations and definitions of terms and words needed for the use of the manual. ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL. Introduction: Explanations and definitions of terms and words needed for the use of the manual.	1.1.4 1.1.5			OK
1.1045 Appendix 1 A 0.2 (b) AMC3 ORO.MLR.100	System of amendment and revision: A record of amendments and revisions with insertion dates and effective dates. System of amendment and revision: A record of amendments and revisions with insertion dates and effective dates.	Page 6-8			OK
1.1045 Appendix 1 A 0.2 (e) AMC3 ORO.MLR.100	System of amendment and revision: A list of effective pages. System of amendment and revision: A list of effective pages or paragraphs.	Page 6-8			OK
1.1045 Appendix 1 B 0.1 AMC3 ORO.MLR.100	General information (e.g. aeroplane dimensions), including a description of the units of measurement used for the operation of the aeroplane type concerned and conversion tables. General information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.	0.1 0.2			OK
1.1045 Appendix 1 B 0.1 AMC3 ORO.MLR.100	General information (e.g. aeroplane dimensions), including a description of the units of measurement used for the operation of the aeroplane type concerned and conversion tables. General information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.	0.1 0.2			OK
1.1045 Appendix 1 B 0.1	General information (e.g. aeroplane dimensions), including a description of the units of measurement used for the operation of	0.1 0.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
AMC3 ORO.MLR.100	the aeroplane type concerned and conversion tables. General information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.				
1.1045 Appendix 1 B 0.1 AMC3 ORO.MLR.100	General information (e.g. aeroplane dimensions), including a description of the units of measurement used for the operation of the aeroplane type concerned and conversion tables. General information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.	0.1 0.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 1	**LIMITATIONS**				
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Operations Manual are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe human factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.	OM-A 1. 1.1.1			OK
1.1045 Appendix 1 B 1.1 (a) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including: Certification status (e.g. CS–23, CS–25, ICAO Annex 16(CS 34 and CS-36), etc.) A description of the certified limitations and the applicable operational limitations should include certification status (e.g. EASA (supplemental) type certificate, environmental certification, etc.).	0.1 0.2			OK
1.1045 Appendix 1 B 1.1 (b) and 1.875 AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including: passenger seating configuration for each aeroplane type including a pictorial presentation; (a) An operator shall not operate an aeroplane unless it is maintained and released to service by an organisation appropriately approved/accepted in accordance with Part 145 except that pre-flight inspections need not necessarily be carried out by the Part 145 organisation. (b) Aeroplane continuing airworthiness requirements needed to comply with the operator certification requirements in OPS 1.180 are those set up in Part M. A description of the certified limitations and the applicable operational limitations should include the following: passenger seating configuration for each aircraft type including a pictorial presentation;	1.1 1.2 1.3 1.4 1.5 1.5.1 1.5.2			OK
1.480 (a)(6)	The following terms used in Subparts F, G, H, I and J, have the following meaning: “Maximum approved passenger seating configuration”. The maximum passenger seating capacity of an individual aeroplane, excluding pilot seats or flight deck seats and cabin crew seats as applicable, used by the operator, approved by the Authority and specified in the Operations Manual.				N/A
1.1045 Appendix 1 B 1.1 (c) and 1.245 (c)(2) AMC3 ORO.MLR.	A description of the certified limitations and the applicable operational limitations including: types of operation that are approved (e.g. VFR/IFR, CAT II/III, RNP Type, flight in known icing conditions, etc.); An operator must ensure that the following data,	1.3			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
100 and GM1 CAT.OP.MPA.140	specific to each type or variant, is included in the Operations Manual: the maximum distance from an adequate aerodrome determined in accordance with subparagraphs (a) and (b) above. Note: The speeds specified above are only intended to be used for establishing the maximum distance from an adequate aerodrome. A description of the certified limitations and the applicable operational limitations should include types of operation that are approved (e.g. VFR/IFR, CAT II/III, RNP, flights in known icing conditions etc.).The OEI cruising speed is intended to be used solely for establishing the maximum distance from an adequate aerodrome. The operator shall include the following data, specific to each type or variant, in the operations manual: (1) the determined OEI cruising speed; and (2) the determined maximum distance from an adequate aerodrome.				
1.1045 Appendix 1 B 1 .1(d) and 1.940 (b) AMC3 ORO.MLR.100 and ORO.FC.200(c)	A description of the certified limitations and the applicable operational limitations including crew composition. (b) Minimum flight crew for operations under IFR or at night. For operations under IFR or at night, an operator shall ensure that: (1) for all turbo-propeller aeroplanes with a maximum approved passenger seating configuration of more than nine and for all turbo-jet aeroplanes, the minimum flight crew is two pilots; or (2) aeroplanes other than those covered by subparagraph (b)1 above are operated by a single pilot provided that the requirements of Appendix 2 to OPS 1.940 are satisfied. If the requirements of Appendix 2 are not satisfied, the minimum flight crew is two pilots. A description of the certified limitations and the applicable operational limitations should include crew composition. Specific requirements for aeroplane operations under instrument flight rules (IFR) or at night. (1) The minimum flight crew shall be two pilots for all turbo-propeller aeroplanes with a maximum operational passenger seating configuration (MOPSC) of more than nine and all turbojet aeroplanes. (2) Aeroplanes other than those covered by (c)(1) shall be operated with a minimum crew of two pilots, unless the requirements of ORO.FC.202 are complied with, in which case they may be operated by a single pilot.	1.4			OK
1.1045 Appendix 1 B 1.1 (e) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including: Mass and centre of gravity. A description of the certified limitations and the applicable operational limitations should include mass and centre of gravity.	1.5.2			OK
1.1045 Appendix 1 B 1.1 (f) and 1.245 (c)(1)	A description of the certified limitations and the applicable operational limitations including: speed limitations; (c) An operator must ensure that the following data, specific to each type or variant,	1.3			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
AMC3 ORO.MLR.100 and GM1 CAT.OP.MPA.140(c)	is included in the Operations Manual: (1) the one-engine-inoperative cruise speed determined in accordance with subparagraph (b) above; A description of the certified limitations and the applicable operational limitations should include the following: speed limitations; ONE-ENGINE-INOPERATIVE (OEI) CRUISING SPEED. The OEI cruising speed is intended to be used solely for establishing the maximum distance from an adequate aerodrome.				
1.1045 Appendix 1 B 1.1 (g) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including Flight envelope(s). A description of the certified limitations and the applicable operational limitations should include the following: flight envelope(s).	1.7			OK
1.1045 Appendix 1 B 1.1 (h) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including wind limits including operations on contaminated runways. A description of the certified limitations and the applicable operational limitations should include wind limits including operations on contaminated runways.	1.11 OM-A 8.1.2 4.1.1			OK
1.1045 Appendix 1 B 1.1 (i) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including performance limitations for applicable configurations.. A description of the certified limitations and the applicable operational limitations should include performance limitations for applicable configurations.	1.9 AFM Section 5			OK
1.1045 Appendix 1 B 1.1 (j) AMC 1.530 (c)(5) AMC3 ORO.MLR.100 and AMC2 CAT.POL.A.305	A description of the certified limitations and the applicable operational limitations including runway slope. Correction factors for runways with slopes in excess of 2% require the acceptance of Authority.. A description of the certified limitations and the applicable operational limitations should include (runway) slope. RUNWAY SLOPE. Unless otherwise specified in the AFM, or other performance or operating manuals from the manufacturer, the take-off distance should be increased by 5 % for each 1 % of upslope except that correction factors for runways with slopes in excess of 2 % should only be applied when the operator has demonstrated to the competent authority that the necessary data in the AFM or the operations manual contain the appropriated procedures and the crew is trained to take-off in runway with slopes in excess of 2 %.	1.10 OM-A 8.1.2			OK
1.1045 Appendix 1 B 1.1 (k)	A description of the certified limitations and the applicable operational limitations including: limitations on wet or contaminated	1.11			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
AMC3 ORO.MLR.100	runways; (l)airframe contamination; A description of the certified limitations and the applicable operational limitations should include for aeroplanes, limitations on wet or contaminated runways.				
1.1045 Appendix 1 B 1.1 (l) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including airframe contamination. A description of the certified limitations and the applicable operational limitations should include airframe contamination.	1.12 OM-A 8.2.4			OK
1.1045 Appendix 1 B 1.1 (m) AMC3 ORO.MLR.100	A description of the certified limitations and the applicable operational limitations including System limitations. A description of the certified limitations and the applicable operational limitations should include system limitations.	1.13			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 2	**NORMAL PROCEDURES**				
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Operations Manual are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe human factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.	OM-A 1. 1.1.1			OK
1.1045 Appendix 1 B 2.1 (a) and 1.290 AMC3 ORO.MLR.100 and CAT.OP.MPA.175	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: (a) pre-flight; (a) An operator shall ensure that an operational flight plan is completed for each intended flight. (b) The commander shall not commence a flight unless he/she is satisfied that: (1) the aeroplane is airworthy; (2) the aeroplane is not operated contrary to the provision of the configuration deviation list (CDL); (3) the instruments and equipment required for the flight to be conducted, in accordance with Subparts K and L, are available; (4) the instruments and equipment are in operable condition except as provided in the MEL; (5) those parts of the operations manual which are required for the conduct of the flight are available; (6) the documents, additional information and forms required to be available by OPS 1.125 and OPS 1.135 are on board; (7) current maps, charts and associated documentation or equivalent data are available to cover the intended operation of the aeroplane including any diversion which may reasonably be expected. This shall include any conversion tables necessary to support operations where metric heights, altitudes and flight levels must be used; (8) ground facilities and services required for the planned flight are available and adequate; (9) the provisions specified in the operations manual in respect of fuel, oil and oxygen requirements, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes, where required, can be complied with for the planned flight; (10) the load is properly distributed and safely secured; (11) the mass of the aeroplane, at the commencement of take-off roll, will be such that the flight can be conducted in compliance with	2 2.1 3. 4. 5. 2.1.1 7.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	Subparts F to I as applicable; and (12) any operational limitation in addition to those covered by subparagraphs 9 and 11 above can be complied with. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include pre-flight. (a) An operational flight plan shall be completed for each intended flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes/ operating sites concerned. (b) The flight shall not be commenced unless the commander is satisfied that: (1) all items stipulated in 2.a.3 of Annex IV to Regulation (EC) No 216/2008 concerning the airworthiness and registration of the aircraft, instrument and equipment, mass and centre of gravity (CG) location, baggage and cargo and aircraft operating limitations can be complied with; (2) the aircraft is not operated contrary to the provisions of the configuration deviation list (CDL); (3) the parts of the operations manual that are required for the conduct of the flight are available; (4) the documents, additional information and forms required to be available by CAT.GEN.MPA.180 are on board; (5) current maps, charts and associated documentation or equivalent data are available to cover the intended operation of the aircraft including any diversion that may reasonably be expected; (6) ground facilities and services required for the planned flight are available and adequate; (7) the provisions specified in the operations manual in respect of fuel, oil, oxygen, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes, where required, can be complied with for the planned flight; and (8) any additional operational limitation can be complied with. (c) Notwithstanding (a), an operational flight plan is not required for operations under VFR of: (1) other-than-complex motor-powered aeroplane taking off and landing at the same aerodrome or operating site; or (2) helicopters with an MCTOM of 3 175 kg or less, by day and over routes navigated by reference to visual landmarks in a local area as specified in the operations manual.				
1.1045 Appendix 1 B 2.1 (b) and 1.355 AMC3 ORO.MLR.100 and CAT.O	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures	2.1.3			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
P.MPA.265	and duties must be included: pre-departure; Before commencing take-off, a commander must satisfy himself/herself that, according to the information available to him/her, the weather at the aerodrome and the condition of the runway intended to be used should not prevent a safe take-off and departure. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following: pre-departure. Before commencing take-off, the commander shall be satisfied that: (a) according to the information available to him/her, the weather at the aerodrome or operating site and the condition of the runway or FATO intended to be used would not prevent a safe take-off and departure; and (b) established aerodrome operating minima will be complied with.				
1.1045 Appendix 1 B 2.1 (c) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: altimeter setting and checking; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include altimeter setting and checking.	2.1.3 2.1.4			OK
1.1045 Appendix 1 B 2.1 (d) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: taxi, take-off and climb; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include taxi, take-off and climb.	2.1.5			OK
1.1045 Appendix 1 B 2.1 (e) and 1.235 AMC3 ORO.MLR.100 and GM1 CAT.OP.MPA.130	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: noise abatement; An operator shall establish appropriate operating departure and arrival/approach procedures for each aircraft type in accordance with the following:	2.1.6			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	(a) The operator shall ensure that safety has priority over noise abatement, and (b) These procedures shall be designed to be simple and safe to operate with no significant increase in crew workload during critical phases of flight, and (c) For each aeroplane type two departure procedures shall be defined, in accordance with ICAO Doc. 8168 (Procedures for air navigation services, “PANS-OPS”), Volume I: (1) noise abatement departure procedure one (NADP 1), designed to meet the close-in noise abatement objective; and (2) noise abatement departure procedure two (NADP 2), designed to meet the distant noise abatement objective; and (3) in addition, each NADP climb profile can only have one sequence of actions. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include noise abatement. TERMINOLOGY (a) ‘Climb profile’ means in this context the vertical path of the NADP as it results from the pilot’s actions (engine power reduction, acceleration, slats/flaps retraction). (b) ‘Sequence of actions’ means the order in which these pilot’s actions are done and their timing. GENERAL (c) The rule addresses only the vertical profile of the departure procedure. Lateral track has to comply with the standard instrument departure (SID). EXAMPLE (d) For a given aeroplane type, when establishing the distant NADP, the operator should choose either to reduce power first and then accelerate, or to accelerate first and then wait until slats/flaps are retracted before reducing power. The two methods constitute two different sequences of actions. (e) For an aeroplane type, each of the two departure climb profiles may be defined by one sequence of actions (one for close-in, one for distant) and two above aerodrome level (AAL) altitudes/heights. These are: (1) the altitude of the first pilot’s action (generally power reduction with or without acceleration). This altitude should not be less than 800 ft AAL; or (2) the altitude of the end of the noise abatement procedure. This altitude should usually not be more than 3 000 ft AAL. These two altitudes may be runway specific when the aeroplane flight management system (FMS) has the relevant function which permits the crew to change thrust reduction and/or acceleration altitude/height. If the aeroplane is not FMS equipped or the FMS is not fitted with the relevant function, two fixed heights should be defined and used for each of the two NADPs.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 2.1 (f) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: cruise and descent; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include cruise and descent.	2.1.7			OK
1.1045 Appendix 1 B 2.1 (g) and 1.400 AMC3 ORO.MLR.100 and CAT.OP.MPA.300	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: approach, landing preparation and briefing; Before commencing an approach to land, the commander must satisfy himself/herself that, according to the information available to him/her, the weather at the aerodrome and the condition of the runway intended to be used should not prevent a safe approach, landing or missed approach, having regard to the performance information contained in the Operations Manual. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include approach, landing preparation and briefing. Before commencing an approach to land, the commander shall be satisfied that, according to the information available to him/her, the weather at the aerodrome and the condition of the runway or FATO intended to be used should not prevent a safe approach, landing or missed approach, having regard to the performance information contained in the operations manual.	2. 2.1.3			OK
1.1045 Appendix 1 B 2.1 (h) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included:VFR approach; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include VFR approach.	2.1.9			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 2.1 (i) AMC3 ORO.MLR.100	Normal procedures and duties must include Instrument approach; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include IFR approach.	2.1.10			OK
1.1045 Appendix 1 B 2.1 (j) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: visual approach and circling; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include visual approach and circling.	2.1.11			OK
1.1045 Appendix 1 B 2.1 (k) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: Missed Approach; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include missed approach.	2.1.12			OK
1.1045 Appendix 1 B 2.1 (l) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: normal landing; The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include normal landing.	2.1.13			OK
1.1045 Appendix 1 B 2.1 (m) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: post landing;	2.1.14			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include post-landing.				
1.1045 Appendix 1 B 2.1 (n) AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: operation on wet and contaminated runways. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include for aeroplanes, operations on wet and contaminated runways.	2.1.15			OK
1.1045 Appendix 1 B 2.1 AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: (a) pre-flight; (b) pre-departure; (c) altimeter setting and checking; (d) taxi, take-off and climb; (e) noise abatement; (f) cruise and descent; (g) approach, landing preparation and briefing; (h) VFR approach; (i) instrument approach; (j) visual approach and circling; (k) missed approach; (l) normal landing; (m) post landing; and (n) operation on wet and contaminated runways. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following: (a) pre-flight, (b) pre-departure, (c) altimeter setting and checking, (d) taxi, take-off and climb, (e) noise abatement, (f) cruise and descent, (g) approach, landing preparation and briefing, (h) VFR approach, (i) IFR approach, (j) visual approach and circling, (k) missed approach, (l) normal landing, (m) post-landing, (n) for aeroplanes, operations on wet and contaminated runways.	2. 2.1			OK
1.1045 Appendix 1 B 2.1 AMC3 ORO.MLR.	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures	2. 2.1			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
100	between flight and cabin crew. The following normal procedures and duties must be included: (a) pre-flight; (b) pre-departure; (c) altimeter setting and checking; (d) taxi, take-off and climb; (e) noise abatement; (f) cruise and descent; (g) approach, landing preparation and briefing; (h) VFR approach; (i) instrument approach; (j) visual approach and circling; (k) missed approach; (l) normal landing; (m) post landing; and (n) operation on wet and contaminated runways. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following: (a) pre-flight, (b) pre-departure, (c) altimeter setting and checking, (d) taxi, take-off and climb, (e) noise abatement, (f) cruise and descent, (g) approach, landing preparation and briefing, (h) VFR approach, (i) IFR approach, (j) visual approach and circling, (k) missed approach, (l) normal landing, (m) post-landing, (n) for aeroplanes, operations on wet and contaminated runways.				
1.1045 Appendix 1 B 2.1 AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: (a) pre-flight; (b) pre-departure; (c) altimeter setting and checking; (d) taxi, take-off and climb; (e) noise abatement; (f) cruise and descent; (g) approach, landing preparation and briefing; (h) VFR approach; (i) instrument approach; (j) visual approach and circling; (k) missed approach; (l) normal landing; (m) post landing; and (n) operation on wet and contaminated runways. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following: (a) pre-flight, (b) pre-departure, (c) altimeter setting and checking, (d) taxi, take-off and climb, (e) noise abatement, (f) cruise and descent, (g) approach, landing preparation and briefing, (h) VFR approach, (i) IFR approach, (j) visual approach and circling, (k) missed approach, (l) normal landing, (m) post-landing, (n) for aeroplanes, operations on wet and contaminated runways.	2. 2.1			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 2.1 AMC3 ORO.MLR.100	The normal procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check- lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following normal procedures and duties must be included: (a) pre-flight; (b) pre-departure; (c) altimeter setting and checking; (d) taxi, take-off and climb; (e) noise abatement; (f) cruise and descent; (g) approach, landing preparation and briefing; (h) VFR approach; (i) instrument approach; (j) visual approach and circling; (k) missed approach; (l) normal landing; (m) post landing; and (n) operation on wet and contaminated runways. The normal procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The normal procedures and duties should include the following: (a) pre-flight, (b) pre-departure, (c) altimeter setting and checking, (d) taxi, take-off and climb, (e) noise abatement, (f) cruise and descent, (g) approach, landing preparation and briefing, (h) VFR approach, (i) IFR approach, (j) visual approach and circling, (k) missed approach, (l) normal landing, (m) post-landing, (n) for aeroplanes, operations on wet and contaminated runways.	2. 2.1			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 3	**ABNORMAL AND EMERGENCY PROCEDURES**				
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Operations Manual are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe human factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.	OM-A 1. 1.1.1			OK
1.1045 Appendix 1 B 3.1 (a) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: (a) crew incapacitation; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include crew incapacitation.	3.1.1			OK
1.1045 Appendix 1 B 3.1 (b) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included Fire and Smoke Drills; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include fire and smoke drills.	3.1.2			OK
1.1045 Appendix 1 B 3.1 (c) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included Unpressurised and partially pressurized flight;	3.1.3			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include for aeroplanes, un-pressurised and partially pressurised flight.				
1.1045 Appendix 1 B 3.1 (d) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included Exceeding structural limits such as overweight landing; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include for aeroplanes, exceeding structural limits such as overweight landing.	3.1.4			OK
1.1045 Appendix 1 3.1 (e) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included exceeding cosmic radiation limits; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include lightning strikes.	3.1.6			OK
1.1045 Appendix 1 B 3.1 (f) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included lightning Strikes; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include	3.1.7			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	distress communications and alerting ATC to emergencies.				
1.1045 Appendix 1 B 3.1 (g) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included distress communications and alerting ATC to emergencies; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include engine/burner failure.	3.1.8			OK
1.1045 Appendix 1 B 3.1 (h) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included engine failure; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include system failures.	3.1.9			OK
1.1045 Appendix 1 B 3.1 (i) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included system failures; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include guidance for diversion in case of serious technical failure.	3.1.9. a)			OK
1.1045 Appendix 1 B 3.1 (j) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal	3.1.9. b)			N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	and emergency procedures and duties must be included guidance for diversion in case of serious technical failure; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning.				
1.1045 Appendix 1 B 3.1 (k) and 1.395 and 1.665 AMC3 ORO.MLR.100 and CAT.OP.MPA.290 and CAT.IDE.A.150	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: ground proximity warning; When undue proximity to the ground is detected by any flight crew member or by a ground proximity warning system, the commander or the pilot to whom conduct of the flight has been delegated shall ensure that corrective action is initiated immediately to establish safe flight conditions. (a) An operator shall not operate a turbine powered aeroplane having a maximum certificated take-off mass in excess of 5 700 kg or a maximum approved passenger seating configuration of more than nine unless it is equipped with a ground proximity warning system that includes a predictive terrain hazard warning function (terrain awareness and warning system — TAWS). (b) The ground proximity warning system must automatically provide, by means of aural signals, which may be supplemented by visual signals, timely and distinctive warning to theflight crew of sink rate, ground proximity, altitude loss after take-off or go-around, incorrect landing configuration and downward glide slope deviation. (c) The terrain awareness and warning system must automatically provide the flight crew, by means of visual and aural signals and a terrain awareness display, with sufficient alerting time to prevent controlled flight into terrain events, and provided a forward looking capability and terrain clearance floor. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include ACAS/TCAS warning for aeroplanes/audio voice alerting device (AVAD) warning for helicopters. When undue proximity to the	3.1.9. b)			N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	ground is detected by a flight crew member or by a ground proximity warning system, the pilot flying shall take corrective action immediately to establish safe flight conditions. (a) Turbine-powered aeroplanes having an MCTOM of more than 5 700 kg or an MOPSC of more than nine shall be equipped with a TAWS that meets the requirements for Class A equipment as specified in an acceptable standard. (b) Reciprocating-engine-powered aeroplanes with an MCTOM of more than 5 700 kg or an MOPSC of more than nine shall be equipped with a TAWS that meets the requirement for Class B equipment as specified in an acceptable standard.				
1.1045 Appendix 1 B 3.1 (l) and 1.668 AMC3 ORO.MLR.100 and CAT.IDE.A.155	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: TCAS Warning; An operator shall not operate a turbine powered aeroplane having a maximum certificated take-off mass in excess of 5 700 kg or a maximum approved passenger seating configuration of more than 19 unless it is equipped with an airborne collision avoidance system with a minimum performance level of at least ACAS II. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning. Unless otherwise provided for by Regulation (EU) No 1332/2011, turbine-powered aeroplanes with an MCTOM of more than 5 700 kg or an MOPSC of more than 19 shall be equipped with ACAS II.	3.1.9. b)			N/A
1.1045 Appendix 1 B 3.1 (m) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: Wind shear The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following	3.1.9. b)			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	abnormal and/or emergency procedures and duties should include emergency landing/ditching.				
1.1045 Appendix 1 B 3.1 (n) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: Emergency Landing/Ditching; The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include for aeroplanes, departure contingency procedures.				N
1.1045 Appendix 1 3.1 (o) AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: Departure contingency procedures. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include the following: for aeroplanes, departure contingency procedures.				N
1.1045 Appendix 1 B 3.1 AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: (a) crew incapacitation; (b) fire and smoke drills; (c) unpressurised and partially pressurised flight; (d) exceeding structural limits such as overweight landing; (e) exceeding cosmic radiation limits; (f) lightning strikes; (g) distress communications and alerting ATC to emergencies; (h) engine failure; (i) system failures; (j) guidance for diversion in case of serious technical failure; (k) ground proximity warning; (l) TCAS warning; (m) wind shear; and (n) emergency landing/ditching; and (o) departure contingency procedures. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures	3.1.9. a) b) c) d) e)			

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include the following: (a) crew incapacitation, (b) fire and smoke drills, (c) for aeroplanes, un-pressurised and partially pressurised flight, (d) for aeroplanes, exceeding structural limits such as overweight landing, (e) lightning strikes, (f) distress communications and alerting ATC to emergencies, (g) engine/burner failure, (h) system failures, (i) guidance for diversion in case of serious technical failure, (j) ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning, (k) ACAS/TCAS warning for aeroplanes/audio voice alerting device (AVAD) warning for helicopters, (l) windshear, (m) emergency landing/ditching, (n) for aeroplanes, departure contingency procedures.				
1.1045 Appendix 1 B 3.1 AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: (a) crew incapacitation; (b) fire and smoke drills; (c) unpressurised and partially pressurised flight; (d) exceeding structural limits such as overweight landing; (e) exceeding cosmic radiation limits; (f) lightning strikes; (g) distress communications and alerting ATC to emergencies; (h) engine failure; (i) system failures; (j) guidance for diversion in case of serious technical failure; (k) ground proximity warning; (l) TCAS warning; (m) wind shear; and (n) emergency landing/ditching; and (o) departure contingency procedures. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include the following: (a) crew incapacitation, (b) fire and smoke drills, (c) for aeroplanes, un-pressurised and partially pressurised flight, (d) for aeroplanes, exceeding structural limits such as overweight landing, (e) lightning strikes, (f) distress communications and alerting ATC to emergencies, (g) engine/burner failure, (h) system failures, (i) guidance for diversion in case of serious technical failure, (j) ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning, (k) ACAS/TCAS warning for aeroplanes/audio voice alerting device (AVAD) warning for helicopters, (l) windshear, (m) emergency landing/ditching, (n) for aeroplanes, departure contingency procedures.	3.1			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 3.1 AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: (a) crew incapacitation; (b) fire and smoke drills; (c) unpressurised and partially pressurised flight; (d) exceeding structural limits such as overweight landing; (e) exceeding cosmic radiation limits; (f) lightning strikes; (g) distress communications and alerting ATC to emergencies; (h) engine failure; (i) system failures; (j) guidance for diversion in case of serious technical failure; (k) ground proximity warning; (l) TCAS warning; (m) wind shear; and (n) emergency landing/ditching; and (o) departure contingency procedures. The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include the following: (a) crew incapacitation, (b) fire and smoke drills, (c) for aeroplanes, un-pressurised and partially pressurised flight, (d) for aeroplanes, exceeding structural limits such as overweight landing, (e) lightning strikes, (f) distress communications and alerting ATC to emergencies, (g) engine/burner failure, (h) system failures, (i) guidance for diversion in case of serious technical failure, (j) ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning, (k) ACAS/TCAS warning for aeroplanes/audio voice alerting device (AVAD) warning for helicopters, (l) windshear, (m) emergency landing/ditching, (n) for aeroplanes, departure contingency procedures.	3.1			OK
1.1045 Appendix 1 B 3.1 AMC3 ORO.MLR.100	The abnormal and emergency procedures and duties assigned to the crew, the appropriate check-lists, the system for use of the check-lists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties must be included: (a) crew incapacitation; (b) fire and smoke drills; (c) unpressurised and partially pressurised flight; (d) exceeding structural limits such as overweight landing; (e) exceeding cosmic radiation limits; (f) lightning strikes; (g) distress communications and alerting ATC to emergencies; (h) engine failure; (i) system failures; (j) guidance for diversion in case of serious technical failure; (k) ground proximity warning; (l) TCAS warning; (m) wind shear; and (n) emergency landing/ditching; and (o) departure contingency procedures.	3.1 4.1.3.			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	The abnormal and/or emergency procedures and duties assigned to the crew, the appropriate checklists, the system for their use and a statement covering the necessary coordination procedures between flight and cabin/other crew members. The following abnormal and/or emergency procedures and duties should include the following: (a) crew incapacitation, (b) fire and smoke drills, (c) for aeroplanes, un-pressurised and partially pressurised flight, (d) for aeroplanes, exceeding structural limits such as overweight landing, (e) lightning strikes, (f) distress communications and alerting ATC to emergencies, (g) engine/burner failure, (h) system failures, (i) guidance for diversion in case of serious technical failure, (j) ground proximity warning, including for helicopters audio voice alerting device (AVAD) warning, (k) ACAS/TCAS warning for aeroplanes/audio voice alerting device (AVAD) warning for helicopters, (l) windshear, (m) emergency landing/ditching, (n) for aeroplanes, departure contingency procedures.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 4.1	**Performance class A aeroplanes**				
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Operations Manual are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe human factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				N/A
1.470 (a) Annex I	An operator shall ensure that multi-engine aeroplanes powered by turbo propeller engines with a maximum approved passenger seating configuration of more than 9 or a maximum take-off mass exceeding 5 700 kg, and all multi-engine turbojet powered aeroplanes are operated in accordance with Subpart G (Performance Class A). REFERE TO Rule				N/A
1.475 (a) CAT.POL.A.105	(a) An operator shall ensure that the mass of the aeroplane: (1) at the start of the take-off; or, in the event of in-flight re-planning; (2) at the point from which the revised operational flight plan applies, is not greater than the mass at which the requirements of the appropriate Subpart can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is provided for in the particular requirement. (a) The mass of the aeroplane: (1) at the start of the take-off; or (2) in the event of in-flight replanning, at the point from which the revised operational flight plan applies, shall not be greater than the mass at which the requirements of the appropriate chapter can be complied with for the flight to be undertaken. Allowance may be made for expected reductions in mass as the flight proceeds and for fuel jettisoning. (b) The approved performance data contained in the AFM shall be used to determine compliance with the requirements of the appropriate chapter, supplemented as necessary with other data as prescribed in the relevant chapter. The operator shall specify other data in the operations manual. When applying the factors prescribed in the appropriate chapter, account may be taken of any operational factors already incorporated in the AFM performance data to avoid double application of factors. (c) Due account shall be taken of aeroplane				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	configuration, environmental conditions and the operation of systems that have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.				
1.475 (b) and 1.485 (a) AMC1 CAT.POL.A.230 and CAT.POL.A.200	An operator shall ensure that the approved performance Data contained in the Aeroplane Flight Manual is used to deter- mine compliance with the requirements of the appropriate Subpart, supplemented as necessary with other data accept- able to the Authority as prescribed in the relevant Subpart. When applying the factors prescribed in the appropriate Subpart, account may be taken of any operational factors already incorporated in the Aeroplane Flight Manual performance data to avoid double application of factors. An operator shall ensure that, for determining compliance with the requirements of this Subpart, the approved performance data in the Aeroplane Flight Manual is supplemented as necessary with other data acceptable to the Authority if the approved performance data in the Aeroplane Flight Manual is insufficient in respect of items such as: (1) accounting for reasonably expected adverse operating conditions such as take-off and landing on contaminated runways; and (2) consideration of engine failure in all flight phases. In those cases where the landing requires the use of an automatic landing system, and the distance published in the AFM includes safety margins equivalent to those contained in CAT.POL.A.230 (a)(1) and CAT.POL.A.235, the landing mass of the aeroplane should be the lesser of: (a) the landing mass determined in accordance with CAT.POL.A.230 (a)(1) or CAT.POL.A.235 as appropriate; or (b) the landing mass determined for the automatic landing distance for the appropriate surface condition, as given in the AFM or equivalent document. Increments due to system features such as beam location or elevations, or procedures such as use of overspeed, should also be included. (a) The approved performance data in the AFM shall be supplemented as necessary with other data if the approved performance data in the AFM is insufficient in respect of items such as: (1) accounting for reasonably expected adverse operating conditions such as take-off and landing on contaminated runways; and (2) consideration of engine failure in all flight phases. (b) For wet and contaminated runways, performance data determined in accordance with applicable standards on certification of large aeroplanes or		AP		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	use of other data referred to in (a) and equivalent requirements referred to in (b) shall be specified in the operations manual.				
1.475 (e) CAT.POL.A.105	An operator shall take account of charting accuracy when assessing compliance with the take-off requirements of the applicable subpart (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters				N/A
1.480 Annex I	Terminology (a) The following terms used in Subparts F, G, H, I and J, have the following meaning: (1) “Accelerate-stop distance available (ASDA)”. The length of the take-off run available plus the length of stop way, if such stop way is declared available by the appropriate Authority and is capable of bearing the mass of the aeroplane under the prevailing operating conditions; (2) “Contaminated runway”. A runway is considered to be contaminated when more than 25 % of the runway surface area (whether in isolated areas or not) within the required length and width being used is covered by the following: (i) surface water more than 3 mm (0,125 in) deep, or by slush, or loose snow, equivalent to more than 3 mm (0,125 in) of water; (ii) snow which has been compressed into a solid mass which resists further compression and will hold together or break into lumps if picked up (compacted snow); or (iii) ice, including wet ice. (3) “Damp runway”. A runway is considered damp when the surface is not dry, but when the moisture on it does not give it a shiny appearance. (4) “Dry runway”. A dry runway is one 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. (5) “Landing distance available (LDA)”. The length of the runway which is declared available by the appropriate Authority and suitable for the ground run of an aeroplane landing. (6) “Maximum approved passenger seating configuration”. The maximum passenger seating capacity of an individual aeroplane, excluding pilot seats or flight deck seats and cabin crew seats as applicable, used by the operator, approved by the Authority and specified in the Operations Manual. (7) “Take-off distance available (TODA)”. The length of the take-off run available plus the length of the clearway available. (8) “Take-off mass”. The take-off mass of the aeroplane shall be taken to be its mass, including everything and every- one carried at the commencement of the take-off run. (9) “Take-off run available (TORA)”. The length of runway which is declared available by the appropriate Authority and suitable for the		AP		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	ground run of an aeroplane taking off. (10) “Wet runway”. A runway is considered wet when the runway surface is covered with water, or equivalent, less than specified in subparagraph (a)2. above or when there is sufficient moisture on the runway surface to cause it to appear reflective, but without significant areas of standing water. (b) The terms “accelerate-stop distance”, “take-off distance”, “take-off run”, “net take-off flight path”, “one engine inoperative en-route net flight path” and “two engines inoperative enroute net flight path” as relating to the aeroplane have their meanings defined in the airworthiness requirements under which the aeroplane was certificated, or as specified by the Authority if it finds that definition inadequate for showing compliance with the performance operating limitations. REFERE TO RULE				
1.1045 Appendix 1 B 4.1.2 AMC3 ORO.MLR.100	If performance data, as required for the appropriate performance class, is not available in the approved AFM, then other data acceptable to the Authority must be included. Alternatively, the Operations Manual may contain cross- reference to the approved data contained in the AFM where such data is not likely to be used often or in an emergency. If performance data, as required for the appropriate performance class, is not available in the AFM, then other data should be included. The OM may contain cross-reference to the data contained in the AFM where such data is not likely to be used often or in an emergency.		AC		N/A
1.1045 Appendix 1 B 4.0 AMC3 ORO.MLR.100	Performance data must be provided in a form in which it can be used without difficulty. Performance data should be provided in a form that can be used without difficulty.				N/A
1.1045 Appendix 1 B 4.1 (a) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: (a) take-off climb limits — mass, altitude, temperature; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: (a) take-off climb limits – mass, altitude, temperature;				N/A
1.1045 Appendix 1 B 4.1 (b)	Performance data. Performance material which provides the necessary data for compliance with the performance requirements				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
AMC3 ORO.MLR.100	prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Take-off field length of dry wet and contaminated runway; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: take-off climb limits – mass, altitude, temperature;				
1.1045 Appendix 1 B 4.1 (c) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Net flight path data for obstacle clearance calculation or, where applicable, take-off flight path; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;				N/A
1.1045 Appendix 1 B 4.1 (d) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: The gradient losses for banked climb outs; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: the gradient losses for banked climb-outs.				N/A
1.1045 Appendix 1 B 4.1 (e) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: En-route climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: en-route climb limits.				N/A
1.1045 Appendix 1 B 4.1 (f) AMC3 ORO.MLR.	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
100	allow the determination of: (f)approach climb limits; (f) landing climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: approach climb limits;				
1.1045 Appendix 1 B 4.1 (g) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: landing field length (dry, wet, contaminated) including the effects of an in-flight failure of a system or device, Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: landing climb limits.				N/A
1.1045 Appendix 1 B 4.1 (h) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: if it affects the landing distance; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: landing field length (for dry, wet and contaminated runway conditions) including the effects of an in-flight failure of a system or device, if it affects the landing distance;				N/A
1.1045 Appendix 1 B 4.1 (i) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Brake energy limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: brake energy limits;				N/A
1.1045 Appendix 1 B 4.1 (j) AMC3 ORO.MLR.	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
100	allow the determination of: speeds applicable for the various flight stages (also considering wet or contaminated runways). Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: speeds applicable for the various flight stages (also considering dry, wet and contaminated runway conditions).				
1.1045 Appendix 1 B 4.1.1 AMC3 ORO.MLR.100	Supplementary data covering flights in icing conditions. Any certificated performance related to an allowable con- figuration, or configuration deviation, such as anti-skid inoperative, must be included. Supplementary data covering flights in icing conditions. Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative.				N/A
1.1045 Appendix 1 B 4.2 (a) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: (a) all engine climb gradients; Additional performance data for aeroplanes. Additional performance data, where applicable, including the following: (a) all engine climb gradients				N/A
1.1045 Appendix 1 B 4.2 (b) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Drift-down data; Additional performance data for aeroplanes. Additional performance data, where applicable, including drift-down data.				N/A
1.1045 Appendix 1 B 4.2 (c) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Effect of de-icing/anti-icing fluids; Additional performance data for aeroplanes. Additional performance data, where applicable, including effect of de-icing/anti-icing fluids.				N/A
1.1045 Appendix 1 B 4.2 (d) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Flight with landing gear down; Additional performance data for aeroplanes. Additional performance data, where applicable, including flight with landing gear down.				N/A
1.1045 Appendix 1 B 4.2 (e) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: For aeroplanes with 3 or more engines, one engine inoperative ferry flights; and Additional performance data for aeroplanes. Additional performance data, where applicable, including for aircraft with 3 or more engines, one-engine-inoperative ferry flights.				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 4.2 (f) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Flights conducted under the provisions of the CDL. Additional performance data for aeroplanes. Additional performance data, where applicable, including flights conducted under the provisions of the configuration deviation list (CDL).				N/A
1.490 (b) CAT.POL.A.205	An operator must meet the following requirements when determining the maximum permitted take-off mass: (1) the accelerate-stop distance must not exceed the accelerate-stop distance available; (2) the take-off distance must not exceed the take-off distance available, with a clearway distance not exceeding half of the take-off run available; (3) the take-off run must not exceed the take-off run available; (4) compliance with this paragraph must be shown using a single value of V1 for the rejected and continued take-off; and (5) on a wet or contaminated runway, the take-off mass must not exceed that permitted for a take-off on a dry run- way under the same conditions. The following requirements shall be met when determining the maximum permitted take-off mass: (1) the accelerate-stop distance shall not exceed the accelerate-stop distance available (ASDA); (2) the take-off distance shall not exceed the take-off distance available, with a clearway distance not exceeding half of the take-off run available (TORA); (3) the take-off run shall not exceed the TORA; (4) a single value of V 1 shall be used for the rejected and continued take-off; and (5) on a wet or contaminated runway, the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions.				N/A
1.490 (c) CAT.POL.A.205	An operator must meet the following requirements when determining the maximum permitted take-off mass: (1) the accelerate-stop distance must not exceed the accelerate-stop distance available; (2) the take-off distance must not exceed the take-off distance available, with a clearway distance not exceeding half of the take-off run available; (3) the take-off run must not exceed the take-off run available; (4) compliance with this paragraph must be shown using a single value of V1 for the rejected and continued take-off; and (5) on a wet or contaminated runway, the take-off mass must not exceed that permitted for a take-off on a dry run- way under the same conditions. (5) not more than 50 % of the reported head-wind component or not less than 150 % of the reported tailwind component; and (6) the loss, if any, of runway length due to alignment of the aeroplane prior to take-off. The following requirements shall be met when determining the				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	maximum permitted take-off mass: (1) the accelerate-stop distance shall not exceed the accelerate-stop distance available (ASDA); (2) the take-off distance shall not exceed the take-off distance available, with a clearway distance not exceeding half of the take-off run available (TORA); (3) the take-off run shall not exceed the TORA; (4) a single value of V 1 shall be used for the rejected and continued take-off; and (5) on a wet or contaminated runway, the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions.				
1.495 (a) CAT.POL.A.210	An operator shall ensure that the net take-off flight path clears all obstacles by a vertical distance of at least 35 ft or by a horizontal distance of at least 90 m plus 0,125 x D, where D is the horizontal distance the aeroplane has travelled from the end of the take-off distance available or the end of the take-off distance if a turn is scheduled before the end of the takeoff distance available. For aeroplanes with a wingspan of less than 60 m a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m, plus 0,125 x D may be used. The net take-off flight path shall be determined in such a way that the aeroplane clears all obstacles by a vertical distance of at least 35 ft or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the take-off distance available (TODA) or the end of the take-off distance if a turn is scheduled before the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m, plus 0,125 × D may be used.				N/A
1.495 (b) CAT.POL.A.210	When showing compliance with subparagraph (a) above, an operator must take account of the following: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported head-wind component or not less than 150 % of the reported tailwind component. (b) When showing compliance with (a): (1) The following items shall be taken into account: (i) the mass of the aeroplane at the commencement of the take-off run; (ii) the pressure altitude at the aerodrome; (iii) the ambient temperature at the aerodrome; and (iv) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.495 (c) CAT.POL.A.210	When showing compliance with subparagraph (a) above: (1) track changes shall not be allowed up to the point at which the net take-off flight path has achieved a height equal to one half the wingspan but not less than 50 ft above the elevation of the end of the take-off run available. There- after, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25° may be scheduled; (2) any part of the net take-off flight path in which the aeroplane is banked by more than 15° must clear all obstacles within the horizontal distances specified in subparagraphs (a), (d) and (e) of this paragraph by a vertical distance of at least 50 ft; and (3) an operator must use special procedures, subject to the approval of the Authority, to apply increased bank angles of not more than 20° between 200 ft and 400 ft, or not more than 30° above 400 ft (See Appendix 1 to OPS 1.495 (c)3). (4) Adequate allowance must be made for the effect of bank angle on operating speeds and flight path including the distance increments resulting from increased operating speeds. (2) Track changes shall not be allowed up to the point at which the net take-off flight path has achieved a height equal to one half the wingspan but not less than 50 ft above the elevation of the end of the TORA. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25° may be scheduled. (3) Any part of the net take-off flight path in which the aeroplane is banked by more than 15° shall clear all obstacles within the horizontal distances specified in (a), (b)(6) and (b)(7) by a vertical distance of at least 50 ft. (4) Operations that apply increased bank angles of not more than 20° between 200 ft and 400 ft, or not more than 30° above 400 ft, shall be carried out in accordance with CAT.POL.A.240. (5) Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path including the distance increments resulting from increased operating speeds. (6) For cases where the intended flight path does not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (i) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (ii) 600 m, for flights under all other conditions		AP		N/A
1.495 (d) CAT.POL.A.210	When showing compliance with subparagraph (a) above for those cases where the intended flight path does not require track changes of more than 15°, an operator need not consider those				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	obstacles which have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. For cases where the intended flight path does not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (i) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (ii) 600 m, for flights under all other conditions.				
1.495 (e) CAT.POL.A.210	When showing compliance with subparagraph (a) above for those cases where the intended flight path does require track changes of more than 15°, an operator need not consider those obstacles which have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m for flights under all other conditions. For cases where the intended flight path requires track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (i) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (ii) 900 m, for flights under all other conditions.				N/A
1.495 (f) GM1 CAT.POL.A.210	An operator shall establish contingency procedures to satisfy the requirements of OPS 1.495 and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of OPS 1.500, or land at either the aerodrome of departure or at a take-off alternate aerodrome. If compliance with CAT.POL.A.210 is based on an engine failure route that differs from the all engine departure route or SID normal departure, a ‘deviation point’ can be identified where the engine failure route deviates from the normal departure route. Adequate obstacle clearance along the normal departure route with failure of the critical engine at the deviation point will normally be available. However, in certain situations the obstacle clearance along the normal departure route may be marginal and should be checked to ensure that, in case of an engine failure after the deviation point, a flight can safely proceed along the normal departure route.				N/A
1.500 CAT.POL.A.215	The net flight path for En-route – One Engine Inoperative.(a) An operator shall ensure that the one engine inoperative en-route net flight path data shown in the Aeroplane Flight Manual, appropriate to the meteorological conditions expected for the flight, complies				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	with either subparagraph (b) or (c) at all points along the route. The net flight path must have a positive gradient at 1 500 ft above the aerodrome where the landing is assumed to be made after engine failure. In meteorological conditions requiring the operation of ice protection systems, the effect of their use on the net flight path must be taken into account. (b) The gradient of the net flight path must be positive at at least 1 000 ft above all terrain and obstructions along the route within 9,3 km (5 nm) on either side of the intended track. (c) The net flight path must permit the aeroplane to continue flight from the cruising altitude to an aerodrome where a landing can be made in accordance with OPS 1.515 or 1.520 as appropriate, the net flight path clearing vertically, by at least 2 000 ft, all terrain and obstructions along the route within 9,3 km (5 nm) on either side of the intended track in accordance with subparagraphs 1 to 4 below: (1) the engine is assumed to fail at the most critical point along the route; (2) account is taken of the effects of winds on the flight path; (3) fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used; and (4) the aerodrome where the aeroplane is assumed to land after engine failure must meet the following criteria: (i) the performance requirements at the expected landing mass are met; and (ii) weather reports or forecasts, or any combination thereof, and field condition reports indicate that a safe landing can be accomplished at the estimated time of landing. (d) When showing compliance with OPS 1.500, an operator must increase the width margins of subparagraphs (b) and (c) above to 18,5 km (10 nm) if the navigational accuracy does not meet the 95 % containment level. (a) The OEI en-route net flight path data shown in the AFM, appropriate to the meteorological conditions expected for the flight, shall allow demonstration of compliance with (b) or (c) at all points along the route. The net flight path shall have a positive gradient at 1 500 ft above the aerodrome where the landing is assumed to be made after engine failure. In meteorological conditions requiring the operation of ice protection systems, the effect of their use on the net flight path shall be taken into account. (b) The gradient of the net flight path shall be positive at least 1 000 ft above all terrain and obstructions along the route within 9,3 km (5 NM) on either side of the intended track. (c) The net flight path shall permit the aeroplane to continue flight from the cruising altitude to an aerodrome where a landing can be made in accordance with CAT.POL.A.225 or CAT.POL.A.230, as appropriate. The net flight path shall clear				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	by at least 2 000 ft, all terrain and obstructions along the route within 9,3 km (5 NM) on either side of the intended track in accordance with the following: (1) the engine is assumed to fail at the most critical point along the route; (2) account is taken of the effects of winds on the flight path; (3) fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used; and (4) the aerodrome where the aeroplane is assumed to land after engine failure shall meet the following criteria: (i) the performance requirements at the expected landing mass are met; and (ii) weather reports and/or forecasts and field condition reports indicate that a safe landing can be accomplished at the estimated time of landing. (d) The operator shall increase the width margins of (b) and (c) to 18,5 km (10 NM) if the navigational accuracy does not meet at least required navigation performance 5 (RNP5).				
1.505 CAT.POL.A.220	(a) An operator shall ensure that at no point along the intended track will an aeroplane having three or more engines be more than 90 minutes, at the all-engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met unless it complies with subparagraphs (b) to (f) below. (b) The two engines inoperative en-route net flight path data must permit the aeroplane to continue the flight, in the expected meteorological conditions, from the point where two engines are assumed to fail simultaneously, to an aerodrome at which it is possible to land and come to a complete stop when using the prescribed procedure for a landing with two engines inoperative. The net flight path must clear vertically, by at least 2 000 ft all terrain and obstructions along the route within 9,3 km (5 nm) on either side of the intended track. At altitudes and in meteorological conditions requiring ice protection systems to be operable, the effect of their use on the net flight path data must be taken into account. If the navigational accuracy does not meet the 95 % containment level, an operator must increase the width margin given above to 18,5 km (10 nm). (c) The two engines are assumed to fail at the most critical point of that portion of the route where the aeroplane is more than 90 minutes, at the all engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met. (d) The net flight path must have a positive gradient at 1 500 ft above the aerodrome where the landing is assumed to be made after the failure of two engines. (e)				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	Fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used. (f) The expected mass of the aeroplane at the point where the two engines are assumed to fail must not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at least 1 500 ft directly over the landing area and thereafter to fly level for 15 minutes. (a) At no point along the intended track shall an aeroplane having three or more engines be more than 90 minutes, at the all-engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met, unless it complies with (b) to (f). (b) The two-engines-inoperative en-route net flight path data shall allow the aeroplane to continue the flight, in the expected meteorological conditions, from the point where two engines are assumed to fail simultaneously to an aerodrome at which it is possible to land and come to a complete stop when using the prescribed procedure for a landing with two engines inoperative. The net flight path shall clear vertically, by at least 2 000 ft, all terrain and obstructions along the route within 9,3 km (5 NM) on either side of the intended track. At altitudes and in meteorological conditions requiring ice protection systems to be operable, the effect of their use on the net flight path data shall be taken into account. If the navigational accuracy does not meet at least RNP5, the operator shall increase the width margin given above to 18,5 km (10 NM). (c) The two engines shall be assumed to fail at the most critical point of that portion of the route where the aeroplane is more than 90 minutes, at the all-engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met. (d) The net flight path shall have a positive gradient at 1 500 ft above the aerodrome where the landing is assumed to be made after the failure of two engines. (e) Fuel jettisoning shall be permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used. (f) The expected mass of the aeroplane at the point where the two engines are assumed to fail shall not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at least 1 500 ft directly over the landing area and thereafter to fly level for 15 minutes.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.510 (a) CAT.POL.A.225	An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475(a) 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. The landing mass of the aeroplane determined in accordance with CAT.POL.A.105(a) shall not exceed the maximum landing mass specified for the altitude and the ambient temperature expected for the estimated time of landing at the destination aerodrome and alternate aerodrome.				N/A
1.510 (b) AMC2 CAT.POL.A.225	For instrument approaches with a missed approach gradient greater than 2,5 % an operator shall verify that the expected landing mass of the aeroplane allows a missed approach with a climb gradient equal to or greater than the applicable missed approach gradient in the one-engine inoperative missed approach configuration and speed (see applicable requirements on certification of large aeroplanes). The use of an alternative method must be approved by the Authority. MISSED APPROACH. (a) For instrument approaches with a missed approach climb gradient greater than 2.5 %, the operator should verify that the expected landing mass of the aeroplane allows for a missed approach with a climb gradient equal to or greater than the applicable missed approach gradient in the OEI missed approach configuration and at the associated speed. (b) For instrument approaches with DH below 200 ft, the operator should verify that the expected landing mass of the aeroplane allows a missed approach gradient of climb, with the critical engine failed and with the speed and configuration used for a missed approach of at least 2.5 %, or the published gradient, whichever is greater.		AP		N/A
1.510 (c) AMC2 CAT.POL.A.225	For instrument approaches with decision heights below 200 ft, an operator must verify that the expected landing mass of the aeroplane allows a missed approach gradient of climb, with the critical engine failed and with the speed and con- figuration used for go-around of at least 2,5 %, or the published gradient, whichever is the greater (see CS AWO 243). The use of an alternative method must be approved by the Authority. OPS 1.book Page 144 Wednesday, August 19, 2009 4:35 PM MISSED APPROACH. (a) For instrument approaches with a missed approach climb gradient greater than 2.5 %, the operator should verify that the expected landing mass of the aeroplane allows for a missed approach with a climb gradient equal to or		AP		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	greater than the applicable missed approach gradient in the OEI missed approach configuration and at the associated speed. (b) For instrument approaches with DH below 200 ft, the operator should verify that the expected landing mass of the aeroplane allows a missed approach gradient of climb, with the critical engine failed and with the speed and configuration used for a missed approach of at least 2.5 %, or the published gradient, whichever is greater.				
1.515 CAT.POL.A.230	Landing – Dry Runways.(a) An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475(a) for the estimated time of landing at the destination aerodrome and at any alternate aerodrome allows a full stop landing from 50 ft above the threshold: (1) For turbo-jet powered aeroplanes, within 60 % of the landing distance available; or (2) For turbo-propeller powered aeroplanes, within 70 % of the landing distance available; (3) For steep approach procedures the Authority may approve the use of landing distance data factored in accordance with subparagraphs (a)1 and (a)2 above as appropriate, based on a screen height of less than 50 ft, but not less than 35 ft. (See Appendix 1 to OPS 1.515(a)3); (4) When showing compliance with subparagraphs (a)1 and (a)2 above, the Authority may exceptionally approve, when satisfied that there is a need (see Appendix 1), the use of short landing operations in accordance with Appendices 1 and 2 together with any other supplementary conditions that the Authority considers necessary in order to ensure an acceptable level of safety in the particular case. (b) When showing compliance with subparagraph (a) above, an operator must take account of the following: (1) the altitude at the aerodrome; (2) not more than 50 % of the head-wind component or not less than 150 % of the tailwind component; and (3) the runway slope in the direction of landing if greater than +/-2 %. (c) When showing compliance with subparagraph (a) above, it must be assumed that: (1) the aeroplane will land on the most favourable runway, in still air; and (2) the aeroplane will land on the runway most likely to be assigned considering the probable wind speed and direction and the ground handling characteristics of the aeroplane, and considering other conditions such as landing aids and terrain. (d) If an operator is unable to comply with subparagraph (c)1 above for a destination aerodrome having a single runway where a landing depends upon a specified wind component, an aeroplane may be despatched if 2 alternate aerodromes are designated which permit full compliance with		AP		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	subparagraphs (a), (b) and (c). Before commencing an approach to land at the destination aerodrome the commander must satisfy himself/herself that a landing can be made in full compliance with OPS 1.510 and subparagraphs (a) and (b) above. (e) If an operator is unable to comply with subparagraph (c)2 above for the destination aerodrome, the aeroplane may be despatched if an alternate aerodrome is designated which permits full compliance with subparagraphs (a), (b) and (c). Landing — dry runways. (a) The landing mass of the aeroplane determined in accordance with CAT.POL.A.105(a) for the estimated time of landing at the destination aerodrome and at any alternate aerodrome shall allow a full stop landing from 50 ft above the threshold: (1) for turbo-jet powered aeroplanes, within 60 % of the landing distance available (LDA); and (2) for turbo-propeller powered aeroplanes, within 70 % of the LDA. (b) For steep approach operations, the operator shall use the landing distance data factored in accordance with (a), based on a screen height of less than 60 ft, but not less than 35 ft, and shall comply with CAT.POL.A.245. (c) For short landing operations, the operator shall use the landing distance data factored in accordance with (a) and shall comply with CAT.POL.A.250. (d) When determining the landing mass, the operator shall take the following into account: (1) the altitude at the aerodrome; (2) not more than 50 % of the headwind component or not less than 150 % of the tailwind component; and (3) the runway slope in the direction of landing if greater than ± 2 %. (e) For dispatching the aeroplane it shall be assumed that: (1) the aeroplane will land on the most favourable runway, in still air; and (2) the aeroplane will land on the runway most likely to be assigned, considering the probable wind speed and direction, the ground handling characteristics of the aeroplane and other conditions such as landing aids and terrain. (f) If the operator is unable to comply with (e)(1) for a destination aerodrome having a single runway where a landing depends upon a specified wind component, the aeroplane may be dispatched if two alternate aerodromes are designated that permit full compliance with (a) to (e). Before commencing an approach to land at the destination aerodrome, the commander shall check that a landing can be made in full compliance with (a) to (d) and CAT.POL.A.225. (g) If the operator is unable to comply with (e)(2) for the destination aerodrome, the aeroplane shall be only dispatched if an alternate aerodrome is designated that allows full compliance with (a) to (e).				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.520 CAT.POL.A.235	Landing — Wet and contaminated runways. (a) An 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 % of the required landing distance, determined in accordance with OPS 1.515. (b) An 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 subparagraph (a) above, or at least 115 % of the landing distance determined in accordance with approved contaminated landing distance data or equivalent, accepted by the Authority, whichever is greater. (c) A landing distance on a wet runway shorter than that required by subparagraph (a) above, but not less than that required by OPS 1.515 (a), may be used if the Aeroplane Flight Manual includes specific additional information about landing distances on wet runways. (d) A landing distance on a specially prepared contaminated runway shorter than that required by subparagraph (b) above, but not less than that required by OPS 1.515 (a), may be used if the Aeroplane Flight Manual includes specific additional information about landing distances on contaminated runways. (e) When showing compliance with subparagraphs (b), (c) and (d) above, the criteria of OPS 1.515 shall be applied accordingly except that OPS 1.515 (a)1 and 2 shall not be applied to subparagraph (b) above. (a) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be at least 115 % of the required landing distance, determined in accordance with CAT.POL.A.230. (b) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the LDA shall be at least the landing distance determined in accordance with (a), or at least 115 % of the landing distance determined in accordance with approved contaminated landing distance data or equivalent, whichever is greater. The operator shall specify in the operations manual if equivalent landing distance data are to be applied. (c) A landing distance on a wet runway shorter than that required by (a), but not less than that required by CAT.POL.A.230(a), may be used if the AFM includes specific additional information about landing distances on wet runways.(d) A landing distance on a specially prepared contaminated runway				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	shorter than that required by (b), but not less than that required by CAT.POL.A.230(a), may be used if the AFM includes specific additional information about landing distances on contaminated runways. (e) For (b), (c) and (d), the criteria of CAT.POL.A.230 shall be applied accordingly, except that CAT.POL.A.230(a) shall not be applied to (b) above.				
1.485 (b) AMC1 CAT.POL.A.200	An operator shall ensure that, for the wet and contaminated runway case, performance data determined in accordance with applicable requirements on certification of large aeroplanes or equivalent acceptable to the Authority is used. WET AND CONTAMINATED RUNWAY DATA. If the performance data have been determined on the basis of a measured runway friction coefficient, the operator should use a procedure correlating the measured runway friction coefficient and the effective braking coefficient of friction of the aeroplane type over the required speed range for the existing runway conditions.		AC		N/A
1.520 (b) CAT.POL.A.235	An 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 subparagraph (a) above, or at least 115 % of the landing distance determined in accordance with approved contaminated landing distance data or equivalent, accepted by the Authority, whichever is greater. (a) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be at least 115 % of the required landing distance, determined in accordance with CAT.POL.A.230. (b) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the LDA shall be at least the landing distance determined in accordance with (a), or at least 115 % of the landing distance determined in accordance with approved contaminated landing distance data or equivalent, whichever is greater. The operator shall specify in the operations manual if equivalent landing distance data are to be applied. (c) A landing distance on a wet runway shorter than that required by (a), but not less than that required by CAT.POL.A.230(a), may be used if the AFM includes specific additional information about landing distances on wet runways.(d) A landing distance on a specially prepared contaminated runway shorter than that required by (b), but not less than that required by CAT.POL.A.230(a), may be used if the AFM includes specific		AC		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	additional information about landing distances on contaminated runways. (e) For (b), (c) and (d), the criteria of CAT.POL.A.230 shall be applied accordingly, except that CAT.POL.A.230(a) shall not be applied to (b) above.				
1.515 (a)(3) CAT.POL.A.245	An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475(a) for the estimated time of landing at the destination aerodrome and at any alternate aerodrome allows a full stop landing from 50 ft above the threshold: For steep approach procedures the Authority may approve the use of landing distance data factored in accordance with subparagraphs (a)1 and (a)2 above as appropriate, based on a screen height of less than 50 ft, but not less than 35 ft. (See Appendix 1 to OPS 1.515(a)3); (a) Steep approach operations using glideslope angles of 4,5° or more and with screen heights of less than 60 ft, but not less than 35 ft, require prior approval by the competent authority. (b) To obtain the approval, the operator shall provide evidence that the following conditions are met: (1) the AFM states the maximum approved glideslope angle, any other limitations, normal, abnormal or emergency procedures for the steep approach as well as amendments to the field length data when using steep approach criteria; (2) for each aerodrome at which steep approach operations are to be conducted: (i) a suitable glide path reference system comprising at least a visual glide path indicating system shall be available; (ii) weather minima shall be specified; and (iii) the following items shall be taken into consideration: (A) the obstacle situation; (B) the type of glide path reference and runway guidance; (C) the minimum visual reference to be required at decision height (DH) and MDA; (D) available airborne equipment; (E) pilot qualification and special aerodrome familiarisation; (F) AFM limitations and procedures; and (G) missed approach criteria.		AP		N/A
1.515 (a)(3) Appendix 1 CAT.POL.A.245	(a) The Authority may approve the application of steep approach procedures using glide slope angles of 4,5° or more and with screen heights of less than 50 ft but not less than 35 ft, provided that the following criteria are met: (1) the Aeroplane Flight Manual must state the maximum approved glide slope angle, any other limitations, normal, abnormal or emergency procedures for the steep approach as well as amendments to the field length data when using steep approach criteria; (2) a suitable glide path reference system comprising at least a visual glide path indicating system must be available at each aerodrome at which steep approach procedures are to be conducted; and (3) weather minima		AP		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	must be specified and approved for each runway to be used with a steep approach. Consideration must be given to the following: (i) the obstacle situation; (ii) the type of glide path reference and runway guidance such as visual aids, MLS, 3D–NAV, ILS, LLZ, VOR, NDB; (iii) the minimum visual reference to be required at DH and MDA; (iv) available airborne equipment; (v) pilot qualification and special aerodrome familiarisation; (vi) Aeroplane Flight Manual limitations and procedures; and (vi) missed approach criteria. (a) Steep approach operations using glideslope angles of 4,5° or more and with screen heights of less than 60 ft, but not less than 35 ft, require prior approval by the competent authority. (b) To obtain the approval, the operator shall provide evidence that the following conditions are met: (1) the AFM states the maximum approved glideslope angle, any other limitations, normal, abnormal or emergency procedures for the steep approach as well as amendments to the field length data when using steep approach criteria; (2) for each aerodrome at which steep approach operations are to be conducted: (i) a suitable glide path reference system comprising at least a visual glide path indicating system shall be available; (ii) weather minima shall be specified; and (iii) the following items shall be taken into consideration: (A) the obstacle situation; (B) the type of glide path reference and runway guidance; (C) the minimum visual reference to be required at decision height (DH) and MDA; (D) available airborne equipment; (E) pilot qualification and special aerodrome familiarisation; (F) AFM limitations and procedures; and (G) missed approach criteria.				
1.515 (a)(4) Appendix 1 and Appendix 2 CAT.POL.A.250	Short landing operations. (a) For the purpose of OPS 1.515 (a)4., the distance used for the calculation of the permitted landing mass may consist of the usable length of the declared safe area plus the declared landing distance available. The Authority may approve such operations in accordance with the following criteria: (1) Demonstration of the need for short landing operations. There must be a clear public interest and operational necessity for the operation, either due to the remoteness of the airport or to physical limitations relating to extending the runway. (2) Aeroplane and operational criteria. (i) Short landing operations will only be approved for aeroplanes where the vertical distance between the path of the pilot's eye and the path of the lowest part of the wheels, with the aeroplane established on the normal glide path, does not exceed 3 m. (ii) When establishing aerodrome operating minima the visibility/RVR must not be less than 1,5 km. In addition, wind limitations must be specified in the Operations Manual. (iii)		AP		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	Minimum pilot experience, training requirements and special aerodrome familiarisation must be specified for such operations in the Operations Manual. (3) It is assumed that the crossing height over the beginning of the usable length of the declared safe area is 50 ft. (4) Additional criteria. The Authority may impose such additional conditions as are deemed necessary for a safe operation taking into account the aeroplane type characteristics, orographic characteristics in the approach area, avail- able approach aids and missed approach/baulked landing considerations. Such additional conditions may be, for instance, the requirement for VASI/PAPI - type visual slope indicator system. Airfield criteria for short landing operations (a) The use of the safe area must be approved by the airport authority. (b) The usable length of the declared safe area under the provisions of 1.515(a)4, and this Appendix, must not exceed 90 m. (c) The width of the declared safe area shall not be less than twice the runway width or twice the wing span, whichever is the greater, centred on the extended runway centre line. (d) The declared safe area must be clear of obstructions or depressions which would endanger an aeroplane undershooting the runway and no mobile object shall be permitted on the declared safe area while the runway is being used for short landing operations. (e) The slope of the declared safe area must not exceed 5 % upward nor 2 % downward in the direction of landing. (f) For the purpose of this operation, the bearing strength requirement of OPS 1.480(a)5 need not apply to the declared safe area. (a) Short landing operations require prior approval by the competent authority. (b) To obtain the approval, the operator shall provide evidence that the following conditions are met: (1) the distance used for the calculation of the permitted landing mass may consist of the usable length of the declared safe area plus the declared LDA; (2) the State of the aerodrome has determined a public interest and operational necessity for the operation, either due to the remoteness of the aerodrome or to physical limitations relating to extending the runway; (3) the vertical distance between the path of the pilot’s eye and the path of the lowest part of the wheels, with the aeroplane established on the normal glide path, does not exceed 3 m; (4) RVR/VIS minimum shall not be less than 1 500 m and wind limitations are specified in the operations manual; (5) minimum pilot experience, training and special aerodrome familiarisation requirements are specified and met; (6) the crossing height over the beginning of the usable length of the declared safe area is 50 ft; (7) the use of the declared safe area is				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	approved by the State of the aerodrome; (8) the usable length of the declared safe area does not exceed 90 m; (9) the width of the declared safe area is not less than twice the runway width or twice the wing span, whichever is greater, centred on the extended runway centre line; (10) the declared safe area is clear of obstructions or depressions that would endanger an aeroplane undershooting the runway and no mobile object is permitted on the declared safe area while the runway is being used for short landing operations; (11) the slope of the declared safe area does not exceed 5 % upward nor 2 % downward in the direction of landing; and (12) additional conditions, if specified by the competent authority, taking into account aeroplane type characteristics, orographic characteristics in the approach area, available approach aids and missed approach/balked landing considerations.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 4.2	**Performance class B aeroplanes**				
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Performance are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.	OM-A 1. 1.1.1			OK
1.470 (b) Annex I	An operator shall ensure that propeller driven aeroplanes with a maximum approved passenger seating configuration of 9 or less, and a maximum take-off mass of 5.700 kg or less are operated in accordance with Subpart H (Performance Class B). REFERE TO RULE	OM-A 8.1.2			OK
1.480 Annex I	Terminology. (a) The following terms used in Subparts F, G, H, I and J, have the following meaning: (1) “Accelerate-stop distance available (ASDA)”. The length of the take-off run available plus the length of stop way, if such stop way is declared available by the appropriate Authority and is capable of bearing the mass of the aeroplane under the prevailing operating conditions; (2) “Contaminated runway”. A runway is considered to be contaminated when more than 25 % of the runway surface area (whether in isolated areas or not) within the required length and width being used is covered by the following: (i) surface water more than 3 mm (0,125 in) deep, or by slush, or loose snow, equivalent to more than 3 mm (0,125 in) of water; (ii) snow which has been compressed into a solid mass which resists further compression and will hold together or break into lumps if picked up (compacted snow); or (iii) ice, including wet ice. (3) “Damp runway”. A runway is considered damp when the surface is not dry, but when the moisture on it does not give it a shiny appearance. (4) “Dry runway”. A dry runway is one 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. (5) “Landing distance available (LDA)”. The length of the runway which is declared available by the appropriate Authority and suitable for the ground run of an aeroplane landing. (6) “Maximum approved passenger seating configuration”. The	OM-A 8.1.2 4.1.3.2	AP		OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	maximum passenger seating capacity of an individual aeroplane, excluding pilot seats or flight deck seats and cabin crew seats as applicable, used by the operator, approved by the Authority and specified in the Operations Manual. (7) “Take-off distance available (TODA)”. The length of the take-off run available plus the length of the clearway available. (8) “Take-off mass”. The take-off mass of the aeroplane shall be taken to be its mass, including everything and every- one carried at the commencement of the take-off run. (9) “Take-off run available (TORA)”. The length of runway which is declared available by the appropriate Authority and suitable for the ground run of an aeroplane taking off. (10) “Wet runway”. A runway is considered wet when the runway surface is covered with water, or equivalent, less than specified in subparagraph (a)2. above or when there is sufficient moisture on the runway surface to cause it to appear reflective, but without significant areas of standing water. REFERE TO RULE				
1.475 (a) CAT.POL.A.105	(a) An operator shall ensure that the mass of the aeroplane: (1) at the start of the take-off; or, in the event of in-flight re-planning; (2) at the point from which the revised operational flight plan applies, is not greater than the mass at which the requirements of the appropriate Subpart can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is provided for in the particular requirement. (b) An operator shall ensure that the approved performance Data contained in the Aeroplane Flight Manual is used to deter- mine compliance with the requirements of the appropriate Subpart, supplemented as necessary with other data accept- able to the Authority as prescribed in the relevant Subpart. When applying the factors prescribed in the appropriate Subpart, account may be taken of any operational factors already incorporated in the Aeroplane Flight Manual performance data to avoid double application of factors. (c) When showing compliance with the requirements of the appropriate Subpart, due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems which have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) An operator shall take account of charting accuracy when assessing compliance with the take-off requirements of the applicable subpart. (a) The mass of the aeroplane: (1) at the start of the take-off; or (2) in the event of in-flight replanning, at the point from which the	OM-A 8.1.2 4.1.3.4			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	revised operational flight plan applies,EN 25.10.2012 Official Journal of the European Union L 296/85 shall not be greater than the mass at which the requirements of the appropriate chapter can be complied with for the flight to be undertaken. Allowance may be made for expected reductions in mass as the flight proceeds and for fuel jettisoning. (b) The approved performance data contained in the AFM shall be used to determine compliance with the requirements of the appropriate chapter, supplemented as necessary with other data as prescribed in the relevant chapter. The operator shall specify other data in the operations manual. When applying the factors prescribed in the appropriate chapter, account may be taken of any operational factors already incorporated in the AFM performance data to avoid double application of factors. (c) Due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems that have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.				
1.475 (b) AMC1 CAT.POL.A.230	An operator shall ensure that the approved performance Data contained in the Aeroplane Flight Manual is used to deter- mine compliance with the requirements of the appropriate Subpart, supplemented as necessary with other data accept- able to the Authority as prescribed in the relevant Subpart. When applying the factors prescribed in the appropriate Subpart, account may be taken of any operational factors already incorporated in the Aeroplane Flight Manual performance data to avoid double application of factors. FACTORING OF AUTOMATIC LANDING DISTANCE PERFORMANCE DATA. In those cases where the landing requires the use of an automatic landing system, and the distance published in the AFM includes safety margins equivalent to those contained in CAT.POL.A.230 (a)(1) and CAT.POL.A.235, the landing mass of the aeroplane should be the lesser of: (a) the landing mass determined in accordance with CAT.POL.A.230 (a)(1) or CAT.POL.A.235 as appropriate; or (b) the landing mass determined for the automatic landing distance for the appropriate surface condition, as given in the AFM or equivalent document. Increments due to system features such as beam location or elevations, or procedures such as use of overspeed, should also be included.		AC		N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 4.1.2 AMC3 ORO.MLR.100	If performance data, as required for the appropriate performance class, is not available in the approved AFM, then other data acceptable to the Authority must be included. Alternatively, the Operations Manual may contain cross- reference to the approved data contained in the AFM where such data is not likely to be used often or in an emergency. If performance data, as required for the appropriate performance class, is not available in the AFM, then other data should be included. The OM may contain cross-reference to the data contained in the AFM where such data is not likely to be used often or in an emergency.	OM-A 8.1.2 4.1.	AC		OK
1.475 (e) CAT.POL.A.105	An operator shall take account of charting accuracy when assessing compliance with the take-off requirements of the applicable subpart. (a) The mass of the aeroplane: (1) at the start of the take-off; or (2) in the event of in-flight replanning, at the point from which the revised operational flight plan applies,EN 25.10.2012 Official Journal of the European Union L 296/85 shall not be greater than the mass at which the requirements of the appropriate chapter can be complied with for the flight to be undertaken. Allowance may be made for expected reductions in mass as the flight proceeds and for fuel jettisoning. (b) The approved performance data contained in the AFM shall be used to determine compliance with the requirements of the appropriate chapter, supplemented as necessary with other data as prescribed in the relevant chapter. The operator shall specify other data in the operations manual. When applying the factors prescribed in the appropriate chapter, account may be taken of any operational factors already incorporated in the AFM performance data to avoid double application of factors. (c) Due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems that have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.	4.1.3.4			OK
1.525 (a) CAT.POL.A.300	An operator shall not operate a single-engine aeroplane: (1) at night; or (2) in instrument meteorological conditions except under special visual flight rules. Note: Limitations on the operation of single-engine aeroplanes are covered by OPS 1.240(a)6. (a) The operator shall not operate a single-engined aeroplane: (1) at night; or (2) in IMC except under special VFR. (b) The operator				N/A

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	shall treat two-engined aeroplanes that do not meet the climb requirements of CAT.POL.A.340 as single-engined aeroplanes.				
1.525 (b) CAT.POL.A.300	An operator shall treat two-engine aeroplanes which do not meet the climb requirements of Appendix 1 to OPS 1.525 (b) as single-engine aeroplanes. (a) The operator shall not operate a single-engined aeroplane: (1) at night; or (2) in IMC except under special VFR. (b) The operator shall treat two-engined aeroplanes that do not meet the climb requirements of CAT.POL.A.340 as single-engined aeroplanes.				N/A
1.470 (d) CAT.POL.A.100	An operator shall ensure that aeroplanes powered by reciprocating engines with a maximum approved passenger seating configuration of more than nine or a maximum takeoff mass exceeding 5 700 kg are operated in accordance with Subpart I (Performance Class C). (a) The operator shall not operate a single-engined aeroplane: (1) at night; or (2) in IMC except under special VFR. (b) The operator shall treat two-engined aeroplanes that do not meet the climb requirements of CAT.POL.A.340 as single-engined aeroplanes.				N/A
1.525 (b) Appendix 1 CAT.POL.A.340	(a) Take-off climb (1) All engines operating (i) The steady gradient of climb after take-off must be at least 4 % with: (A) take-off power on each engine; (B) the landing gear extended except that if the landing gear can be retracted in not more than 7 seconds, it may be assumed to be retracted; (C) the wing flaps in the take-off position(s); and (D) a climb speed not less than the greater of 1,1 VMC and 1,2 VS1. (2) One engine inoperative (i) The steady gradient of climb at an altitude of 400 ft above the take-off surface must be measurably positive with: (A) the critical engine inoperative and its propeller in the minimum drag position; (B) the remaining engine at take-off power; (C) the landing gear retracted; (D) the wing flaps in the take-off position(s); and (E) a climb speed equal to that achieved at 50 ft. (ii) The steady gradient of climb must be not less than 0,75 % at an altitude of 1 500 ft above the take-off surface with: (A) the critical engine inoperative and its propeller in the minimum drag position; (B) the remaining engine at not more than maximum continuous power; (C) the landing gear retracted; (D) the wing flaps retracted; and (E) a climb speed not less than 1,2 VS1. (b) Landing climb (1) All engines operating (i) The steady gradient of climb must be at least 2,5 % with: (A) not more than the power or thrust that is available eight seconds after initiation of movement of the power controls from the minimum flight idle position; (B) the landing gear extended; (C) the wing flaps in the landing position; and (D) a climb speed equal to VREF. (2) One	4.1.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	engine inoperative (i) The steady gradient of climb must be not less than 0,75 % at an altitude of 1 500 ft above the landing surface with: (A) the critical engine inoperative and its propeller in the minimum drag position; (B) the remaining engine at not more than maximum continuous power; (C) the landing gear retracted; (D) the wing flaps retracted; and (E) a climb speed not less than 1,2 VS1. The operator of a two-engined aeroplane shall fulfil the following take-off and landing climb requirements. (a) Take-off climb (1) All engines operating (i) The steady gradient of climb after take-off shall be at least 4 % with: (A) take-off power on each engine; (B) the landing gear extended, except that if the landing gear can be retracted in not more than seven seconds, it may be assumed to be retracted; (C) the wing flaps in the take-off position(s); and (D) a climb speed not less than the greater of 1,1 V MC (minimum control speed on or near ground) and 1,2 V S1 (stall speed or minimum steady flight speed in the landing configuration). (2) OEI (i) The steady gradient of climb at an altitude of 400 ft above the take-off surface shall be measurably positive with: (A) the critical engine inoperative and its propeller in the minimum drag position; (B) the remaining engine at take-off power; (C) the landing gear retracted; (D) the wing flaps in the take-off position(s); and (E) a climb speed equal to that achieved at 50 ft. (ii) The steady gradient of climb shall be not less than 0,75 % at an altitude of 1 500 ft above the take-off surface with: (A) the critical engine inoperative and its propeller in the minimum drag position; (B) the remaining engine at not more than maximum continuous power; (C) the landing gear retracted; (D) the wing flaps retracted; and (E) a climb speed not less than 1,2 V S1 . (b) Landing climb (1) All engines operating (i) The steady gradient of climb shall be at least 2,5 % with: (A) not more than the power or thrust that is available eight seconds after initiation of movement of the power controls from the minimum flight idle position; (B) the landing gear extended; (C) the wing flaps in the landing position; and (D) a climb speed equal to V REF (reference landing speed). (2) OEI (i) The steady gradient of climb shall be not less than 0,75 % at an altitude of 1 500 ft above the landing surface with: (A) the critical engine inoperative and its propeller in the minimum drag position; (B) the remaining engine at not more than maximum continuous power; (C) the landing gear retracted; (D) the wing flaps retracted; and (E) a climb speed not less than 1,2 V S1 .				
1.1045 Appendix 1 B 4.0	Performance data must be provided in a form in which it can be used without difficulty.	OM-A 8.1.2.			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
AMC3 ORO.MLR.100	Performance data should be provided in a form that can be used without difficulty.				
1.1045 Appendix 1 B 4.1 (a) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: (a) take-off climb limits — mass, altitude, temperature; Take-off climb limits – Mass, Altitude and Temperature Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: take-off climb limits – mass, altitude, temperature.	4.1.3.1			OK
1.1045 Appendix 1 B 4.1 (b) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Take-off field length of dry, wet and contaminated runways; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: take-off field length (for dry, wet and contaminated runway conditions).	4.1.3.1			OK
1.1045 Appendix 1 B 4.1 (c) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Net flight path data for obstacle clearance calculation or, where applicable, take-off flight path; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: net flight path data for obstacle clearance calculation or, where applicable, take-off flight path.	4.1.3.2			OK
1.1045 Appendix 1 B 4.1 (d) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: the gradient losses for banked climb outs; Performance data. Performance material that provides the	4.1.3.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: gradient losses for banked climb-outs.				
1.1045 Appendix 1 B 4.1 (e) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: En-route climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: en-route climb limits.	4.1.2			OK
1.1045 Appendix 1 B 4.1 (f) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Approach climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: approach climb limits.	4.1.3.4			OK
1.1045 Appendix 1 B 4.1 (g) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Landing climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: landing climb limits.	4.1.3.4			OK
1.1045 Appendix 1 B 4.1 (h) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Landing field length of dry, wet and contaminated runways including the effects of an in-flight failure of a system or device, if it affects the landing distance; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of	OM-A 8.1.2 4.1. AFM Section 5 4.1.3			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	the following: landing field length (for dry, wet and contaminated runway conditions) including the effects of an in-flight failure of a system or device, if it affects the landing distance.				
1.1045 Appendix 1 B 4.1 (i) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Brake energy limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: brake energy limits.				N/A
1.1045 Appendix 1 B 4.1 (j) AMC3 ORO.MLR.100	Performance data. Performance material which provides the necessary data for compliance with the performance requirements prescribed in OPS 1 Subparts F, G, H and I must be included to allow the determination of: Speeds applicable for the various flight stages (also considering wet or contaminated runways). Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of the following: speeds applicable for the various flight stages (also considering dry, wet and contaminated runway conditions).	4.1. AFM Section 5 OM-A 8.1.2 4.1.3			OK
1.1045 Appendix 1 B 4.1.1 AMC3 ORO.MLR.100	Supplementary data covering flights in icing conditions. Any certificated performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative, must be included. Supplementary data covering flights in icing conditions. Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative.	4.1.3.1 4.1.3.3 AFM Section 5			OK
1.1045 Appendix 1 B 4.2 (a) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: (a) all engine climb gradients; Additional performance data for aeroplanes. Additional performance data, where applicable, including all engine climb gradients.	4.1.3. AFM Section 5			OK
1.1045 Appendix 1 B 4.2 (b) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Drift-down data; Additional performance data for aeroplanes. Additional performance data, where applicable, including drift-down data.	5.1.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.1045 Appendix 1 B 4.2 (c) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Effect of de-icing/anti-icing fluids; Additional performance data for aeroplanes. Additional performance data, where applicable, including effect of de-icing/anti-icing fluids.	AFM Section 5			OK
1.1045 Appendix 1 B 4.2 (d) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Flight with landing gear down; Additional performance data for aeroplanes. Additional performance data, where applicable, including flight with landing gear down.	AFM Section 5			OK
1.530 (a) CAT.POL.A.305	An operator shall ensure that the take-off mass does not exceed the maximum take-off mass specified in the Aeroplane Flight Manual for the pressure altitude and the ambient temperature at the aerodrome at which the take-off is to be made. (a) The take-off mass shall not exceed the maximum take-off mass specified in the AFM for the pressure altitude and the ambient temperature at the aerodrome of departure. (b) The unfactored take-off distance, specified in the AFM, shall not exceed: (1) when multiplied by a factor of 1,25, the take-off run available (TORA); or (2) when stop way and/or clearway is available, the following: (i) the TORA; (ii) when multiplied by a factor of 1,15, the take-off distance available (TODA); or (iii) when multiplied by a factor of 1,3, the ASDA. (c) When showing compliance with (b), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; (4) the runway surface condition and the type of runway surface; (5) the runway slope in the direction of take-off; and (6) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.	4.1.3.4 6.4.1 LDM 5990 6390 ContCalc.?			N
1.530 (b) CAT.POL.A.305	An operator shall ensure that the unfactored take-off distance, as specified in the Aeroplane Flight Manual does not exceed: (1) when multiplied by a factor of 1,25, the take-off run available; or (2) when stop way and/or clearway is available, the following: (i) the take-off run available; (ii) when multiplied by a factor of 1,15, the take-off distance available; and (iii) when multiplied by a factor of 1,3, the accelerate-stop distance available. (a) The take-off mass shall not exceed the maximum take-off mass specified in the AFM for the pressure altitude and the ambient temperature at the aerodrome of departure. (b) The unfactored take-off distance, specified in the AFM, shall not exceed: (1) when multiplied by a factor of 1,25, the take-off run available (TORA); or	OM-A 8.1.4.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	(2) when stop way and/or clearway is available, the following: (i) the TORA; (ii) when multiplied by a factor of 1,15, the take-off distance available (TODA); or (iii) when multiplied by a factor of 1,3, the ASDA. (c) When showing compliance with (b), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; (4) the runway surface condition and the type of runway surface; (5) the runway slope in the direction of take-off; and (6) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.				
1.530 (c) CAT.POL.A.305	When showing compliance with subparagraph (b) above, an operator shall take account of the following: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; (4) the runway surface condition and the type of runway surface; (5) the runway slope in the direction of take-off; and (6) Not more than 50 % of the reported head-wind component or not less than 150 % of the reported tail-wind component. (a) The take-off mass shall not exceed the maximum take-off mass specified in the AFM for the pressure altitude and the ambient temperature at the aerodrome of departure. (b) The unfactored take-off distance, specified in the AFM, shall not exceed: (1) when multiplied by a factor of 1,25, the take-off run available (TORA); or (2) when stop way and/or clearway is available, the following: (i) the TORA; (ii) when multiplied by a factor of 1,15, the take-off distance available (TODA); or (iii) when multiplied by a factor of 1,3, the ASDA. (c) When showing compliance with (b), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; (4) the runway surface condition and the type of runway surface; (5) the runway slope in the direction of take-off; and (6) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.	OM-A 8.1.4			OK
AMC OPS 1.530 (c)(5) AMC2 CAT.POL.A.305	Unless otherwise specified in the Aeroplane Flight Manual or other performance, or operating manuals from the manufacturers, the take-off distance should be increased by 5% for each 1% of upslope except that correction factors for runways with slopes in excess of 2% require the acceptance of the Authority. Unless otherwise specified in the AFM, or other performance or operating manuals from the manufacturer, the take-off distance	OM-A 8.1.4.2	AC		OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	should be increased by 5 % for each 1 % of upslope except that correction factors for runways with slopes in excess of 2 % should only be applied when the operator has demonstrated to the competent authority that the necessary data in the AFM or the operations manual contain the appropriated procedures and the crew is trained to take-off in runway with slopes in excess of 2 %.				
1.535 (a) CAT.POL.A.310, (a) - (d)	An operator shall ensure that the take-off flight path of aeroplanes with two or more engines, determined in accordance with this subparagraph, clears all obstacles by a vertical margin of at least 50 ft, or by a horizontal distance of at least 90 m plus 0,125 x D, where D is the horizontal distance travelled by the aeroplane from the end of the take-off distance available or the end of the take-off distance if a turn is scheduled before the end of the take-off distance avail- able except as provided in subparagraphs (b) and (c) below. For aeroplanes with a wingspan of less than 60 m a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m, plus 0,125 x D may be used. When showing compliance with this subparagraph it must be assumed that: (1) the take-off flight path begins at a height of 50 ft above the surface at the end of the take-off distance required by OPS 1.530 (b) and ends at a height of 1 500 ft above the surface; (2) the aeroplane is not banked before the aeroplane has reached a height of 50 ft above the surface, and that there- after the angle of bank does not exceed 15°; (3) failure of the critical engine occurs at the point on the all engine take-off flight path where visual reference for the purpose of avoiding obstacles is expected to be lost; (4) the gradient of the take-off flight path from 50 ft to the assumed engine failure height is equal to the average all- engine gradient during climb and transition to the en-route configuration, multiplied by a factor of 0,77; and (5) the gradient of the take-off flight path from the height reached in accordance with subparagraph 4 above to the end of the take-off flight path is equal to the one engine inoperative en-route climb gradient shown in the Aeroplane Flight Manual. (a) The take-off flight path of aeroplanes with two or more engines shall be determined in such a way that the aeroplane clears all obstacles by a vertical distance of at least 50 ft, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance travelled by the aeroplane from the end of the TODA or the end of the take-off distance if a turn is scheduled before the end of the TODA, except as provided in (b) and (c). For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be	OM-A 8.1.4.2			

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	used. It shall be assumed that: (1) the take-off flight path begins at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.305(b) and ends at a height of 1 500 ft above the surface; (2) the aeroplane is not banked before the aeroplane has reached a height of 50 ft above the surface, and thereafter the angle of bank does not exceed 15°; (3) failure of the critical engine occurs at the point on the all engine take-off flight path where visual reference for the purpose of avoiding obstacles is expected to be lost; (4) the gradient of the take-off flight path from 50 ft to the assumed engine failure height is equal to the average all- engines gradient during climb and transition to the en-route configuration, multiplied by a factor of 0,77; and (5) the gradient of the take-off flight path from the height reached in accordance with (a)(4) to the end of the take-off flight path is equal to the OEI en-route climb gradient shown in the AFM. (b) For cases where the intended flight path does not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the flight is conducted under conditions allowing visual course guidance navigation, or if navigational aids are available enabling the pilot to maintain the intended flight path with the same accuracy; or (2) 600 m, for flights under all other conditions. (c) For cases where the intended flight path requires track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, for flights under conditions allowing visual course guidance navigation; or (2) 900 m, for flights under all other conditions. (d) When showing compliance with (a) to (c), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.				
1.535 (b) CAT.POL.A.310, (a) - (d)	When showing compliance with subparagraph (a) above for those cases where the intended flight path does not require track changes of more than 15°, an operator need not consider those obstacles which have a lateral distance greater than: (1) 300 m, if the flight is conducted under conditions allowing visual course guidance navigation, or if navigational aids are available enabling the pilot to maintain the intended flight path with the same accuracy (see Appendix 1 to OPS 1.535 (b)1. and (c)1.); or (2) 600 m, for flights under all other conditions.	4.1.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	(a) The take-off flight path of aeroplanes with two or more engines shall be determined in such a way that the aeroplane clears all obstacles by a vertical distance of at least 50 ft, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance travelled by the aeroplane from the end of the TODA or the end of the take-off distance if a turn is scheduled before the end of the TODA, except as provided in (b) and (c). For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. It shall be assumed that: (1) the take-off flight path begins at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.305(b) and ends at a height of 1 500 ft above the surface; (2) the aeroplane is not banked before the aeroplane has reached a height of 50 ft above the surface, and thereafter the angle of bank does not exceed 15°; (3) failure of the critical engine occurs at the point on the all engine take-off flight path where visual reference for the purpose of avoiding obstacles is expected to be lost; (4) the gradient of the take-off flight path from 50 ft to the assumed engine failure height is equal to the average all- engines gradient during climb and transition to the en-route configuration, multiplied by a factor of 0,77; and (5) the gradient of the take-off flight path from the height reached in accordance with (a)(4) to the end of the take-off flight path is equal to the OEI en-route climb gradient shown in the AFM. (b) For cases where the intended flight path does not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the flight is conducted under conditions allowing visual course guidance navigation, or if navigational aids are available enabling the pilot to maintain the intended flight path with the same accuracy; or (2) 600 m, for flights under all other conditions. (c) For cases where the intended flight path requires track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, for flights under conditions allowing visual course guidance navigation; or (2) 900 m, for flights under all other conditions. (d) When showing compliance with (a) to (c), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.535 (c) CAT.POL.A.310, (a) - (d)	When showing compliance with subparagraph (a) above for those cases where the intended flight path requires track changes of more than 15°, an operator need not consider those obstacles which have a lateral distance greater than: (1) 600 m for flights under conditions allowing visual course guidance navigation (see Appendix 1 to OPS 1.535 (b)1 and (c)1); (2) 900 m for flights under all other conditions. (a) The take-off flight path of aeroplanes with two or more engines shall be determined in such a way that the aeroplane clears all obstacles by a vertical distance of at least 50 ft, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance travelled by the aeroplane from the end of the TODA or the end of the take-off distance if a turn is scheduled before the end of the TODA, except as provided in (b) and (c). For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. It shall be assumed that: (1) the take-off flight path begins at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.305(b) and ends at a height of 1 500 ft above the surface; (2) the aeroplane is not banked before the aeroplane has reached a height of 50 ft above the surface, and thereafter the angle of bank does not exceed 15°; (3) failure of the critical engine occurs at the point on the all engine take-off flight path where visual reference for the purpose of avoiding obstacles is expected to be lost; (4) the gradient of the take-off flight path from 50 ft to the assumed engine failure height is equal to the average all- engines gradient during climb and transition to the en-route configuration, multiplied by a factor of 0,77; and (5) the gradient of the take-off flight path from the height reached in accordance with (a)(4) to the end of the take-off flight path is equal to the OEI en-route climb gradient shown in the AFM. (b) For cases where the intended flight path does not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the flight is conducted under conditions allowing visual course guidance navigation, or if navigational aids are available enabling the pilot to maintain the intended flight path with the same accuracy; or (2) 600 m, for flights under all other conditions. (c) For cases where the intended flight path requires track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, for flights under conditions allowing visual course guidance navigation;	4.1.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	or (2) 900 m, for flights under all other conditions. (d) When showing compliance with (a) to (c), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.				
1.535 (d) CAT.POL.A.310, (a) - (d)	When showing compliance with subparagraphs (a), (b) and (c) above, an operator must take account of the following: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported head-wind component or not less than 150 % of the reported tail-wind component. (a) The take-off flight path of aeroplanes with two or more engines shall be determined in such a way that the aeroplane clears all obstacles by a vertical distance of at least 50 ft, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance travelled by the aeroplane from the end of the TODA or the end of the take-off distance if a turn is scheduled before the end of the TODA, except as provided in (b) and (c). For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. It shall be assumed that: (1) the take-off flight path begins at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.305(b) and ends at a height of 1 500 ft above the surface; (2) the aeroplane is not banked before the aeroplane has reached a height of 50 ft above the surface, and thereafter the angle of bank does not exceed 15°; (3) failure of the critical engine occurs at the point on the all engine take-off flight path where visual reference for the purpose of avoiding obstacles is expected to be lost; (4) the gradient of the take-off flight path from 50 ft to the assumed engine failure height is equal to the average all- engines gradient during climb and transition to the en-route configuration, multiplied by a factor of 0,77; and (5) the gradient of the take-off flight path from the height reached in accordance with (a)(4) to the end of the take-off flight path is equal to the OEI en-route climb gradient shown in the AFM. (b) For cases where the intended flight path does not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the flight is conducted under conditions allowing visual course	4.1.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	guidance navigation, or if navigational aids are available enabling the pilot to maintain the intended flight path with the same accuracy; or (2) 600 m, for flights under all other conditions. (c) For cases where the intended flight path requires track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, for flights under conditions allowing visual course guidance navigation; or (2) 900 m, for flights under all other conditions. (d) When showing compliance with (a) to (c), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component.				
1.535 Appendix 1 (b)(1) and (c)(1) AMC1 CAT.POL.A.310	Take-off Flight Path – Visual Course Guidance Navigation.In order to allow visual course guidance navigation, an operator must ensure that the weather conditions prevailing at the time of operation, including ceiling and visibility, are such that the obstacle and/or ground reference points can be seen and identified. The Operations Manual must specify, for the aerodrome(s) concerned, the minimum weather conditions which enable the flight crew to continuously determine and maintain the correct flight path with respect to ground reference points, so as to provide a safe clearance with respect to obstructions and terrain as follows: (a) the procedure must be well defined with respect to ground reference points so that the track to be flown can be analysed for obstacle clearance requirements; (b) the procedure must be within the capabilities of the aeroplane with respect to forward speed, bank angle and wind effects; (c) a written and/or pictorial description of the procedure must be provided for crew use; and (d) the limiting environmental conditions must be specified (e.g. wind, cloud, visibility, day/night, ambient lighting, obstruction lighting). Take-off Flight Path – Visual Course Guidance Navigation.(a) In order to allow visual course guidance navigation, the weather conditions prevailing at the time of operation, including ceiling and visibility, should be such that the obstacle and/or ground reference points can be seen and identified. (b) The operations manual should specify, for the aerodrome(s) concerned, the minimum weather conditions that enable the flight crew to continuously determine and maintain the correct flight path with respect to ground reference points, so as to provide a safe clearance with respect to obstructions and terrain as follows: (1) the procedure	4.1.2			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	should be well defined with respect to ground reference points so that the track to be flown can be analysed for obstacle clearance requirements; (2) the procedure should be within the capabilities of the aeroplane with respect to forward speed, bank angle and wind effects; (3) a written and/or pictorial description of the procedure should be provided for crew use; and (4) the limiting environmental conditions should be specified (e.g. wind, cloud, visibility, day/night, ambient lighting, obstruction lighting).				
1.540 CAT.POL.A.315	En-Route – Multi-engined aeroplanes. (a) An operator shall ensure that the aeroplane, in the meteorological conditions expected for the flight, and in the event of the failure of one engine, with the remaining engines operating within the maximum continuous power conditions specified, is capable of continuing flight at or above the relevant minimum altitudes for safe flight stated in the Operations Manual to a point 1 000 ft above an aerodrome at which the performance requirements can be met. (b) When showing compliance with subparagraph (a) above: (1) the aeroplane must not be assumed to be flying at an altitude exceeding that at which the rate of climb equals 300 ft per minute with all engines operating within the maximum continuous power conditions specified; and (2) the assumed en-route gradient with one engine inoperative shall be the gross gradient of descent or climb, as appropriate, respectively increased by a gradient of 0,5 %, or decreased by a gradient of 0,5 %. (a) The aeroplane, in the meteorological conditions expected for the flight and in the event of the failure of one engine, with the remaining engines operating within the maximum continuous power conditions specified, shall be capable of continuing flight at or above the relevant minimum altitudes for safe flight stated in the operations manual to a point of 1 000 ft above an aerodrome at which the performance requirements can be met. (b) It shall be assumed that, at the point of engine failure: (1) the aeroplane is not flying at an altitude exceeding that at which the rate of climb equals 300 ft per minute with all engines operating within the maximum continuous power conditions specified; and (2) the en-route gradient with OEI shall be the gross gradient of descent or climb, as appropriate, respectively increased by a gradient of 0,5 %, or decreased by a gradient of 0,5 %.	OM-A 8.1.3			OK
1.542 CAT.POL.A.320	(a) An operator shall ensure that the aeroplane, in the meteorological conditions expected for the flight, and in the event of engine failure, is capable of reaching a place at which a safe forced landing can be made. For landplanes, a place on land is	OM-A 8.1.3			OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	required, unless otherwise approved by the Authority. (b) When showing compliance with subparagraph (a) above: (1) the aeroplane must not be assumed to be flying, with the engine operating within the maximum continuous power conditions specified, at an altitude exceeding that at which the rate of climb equals 300 ft per minute; and (2) the assumed en-route gradient shall be the gross gradient of descent increased by a gradient of 0,5 %. (a) In the meteorological conditions expected for the flight, and in the event of engine failure, the aeroplane shall be capable of reaching a place at which a safe forced landing can be made. (b) It shall be assumed that, at the point of engine failure: (1) the aeroplane is not flying at an altitude exceeding that at which the rate of climb equals 300 ft per minute, with the engine operating within the maximum continuous power conditions specified; and (2) the en-route gradient is the gross gradient of descent increased by a gradient of 0,5 %.				
1.542 (a) AMC1 CAT.POL.A.320	An operator shall ensure that the aeroplane, in the meteorological conditions expected for the flight, and in the event of engine failure, is capable of reaching a place at which a safe forced landing can be made. For landplanes, a place on land is required, unless otherwise approved by the Authority. ENGINE FAILURE. CAT.POL.A.320 (a) requires the operator to ensure that in the event of an engine failure, the aeroplane should be capable of reaching a point from which a safe forced landing can be made. Unless otherwise specified by the competent authority, this point should be 1 000 ft above the intended landing area.	OM-A 8.1.3	AP		OK
1.545 CAT.POL.A.325	An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475 (a) 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. The landing mass of the aeroplane determined in accordance with CAT.POL.A.105(a) shall not exceed the maximum landing mass specified for the altitude and the ambient temperature expected at the estimated time of landing at the destination aerodrome and alternate aerodrome.	4.1.3.3			OK
1.550 CAT.POL.A.330	Landing – Dry runway.(a) An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475 (a) for the estimated time of landing allows a full stop landing from 50 ft above the threshold within 70 % of the landing distance	OM-A 8.1.4.2	AP		OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	available at the destination aerodrome and at any alternate aerodrome. (1) The Authority may approve the use of landing distance data factored in accordance with this paragraph based on a screen height of less than 50 ft, but not less than 35 ft (see Appendix 1 to OPS 1.550 (a)). (2) The Authority may approve short landing operations, in accordance with the criteria in Appendix 2 to OPS 1.550 (a). (b) When showing compliance with subparagraph (a) above, an operator shall take account of the following: (1) the altitude at the aerodrome; (2) not more than 50 % of the head-wind component or not less than 150 % of the tailwind component. (3) the runway surface condition and the type of runway surface; and (4) the runway slope in the direction of landing; (c) For despatching an aeroplane in accordance with subparagraph (a) above, it must be assumed that: (1) the aeroplane will land on the most favourable runway, in still air; and (2) the aeroplane will land on the runway most likely to be assigned considering the probable wind speed and direction and the ground handling characteristics of the aeroplane, and considering other conditions such as landing aids and terrain. (d) If an operator is unable to comply with subparagraph (c)2 above for the destination aerodrome, the aeroplane may be despatched if an alternate aerodrome is designated which permits full compliance with subparagraphs (a), (b) and (c) above. (a) The landing mass of the aeroplane determined in accordance with CAT.POL.A.105(a) for the estimated time of landing at the destination aerodrome and at any alternate aerodrome shall allow a full stop landing from 50 ft above the threshold within 70 % of the LDA taking into account: (1) the altitude at the aerodrome; (2) not more than 50 % of the headwind component or not less than 150 % of the tailwind component; (3) the runway surface condition and the type of runway surface; and (4) the runway slope in the direction of landing. (b) For steep approach operations, the operator shall use landing distance data factored in accordance with (a) based on a screen height of less than 60 ft, but not less than 35 ft, and comply with CAT.POL.A.345. (c) For short landing operations, the operator shall use landing distance data factored in accordance with (a) and comply with CAT.POL.A.350. (d) For dispatching the aeroplane in accordance with (a) to (c), it shall be assumed that: (1) the aeroplane will land on the most favourable runway, in still air; and (2) the aeroplane will land on the runway most likely to be assigned considering the probable wind speed and direction, the ground handling characteristics of the aeroplane and other conditions such				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	as landing aids and terrain. (e) If the operator is unable to comply with (d)(2) for the destination aerodrome, the aeroplane shall only be dispatched if an alternate aerodrome is designated that permits full compliance with (a) to (d).				
1.555 CAT.POL.A.335	Landing – Wet and Contaminated Runways.(a) An 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 equal to or exceeds the required landing distance, determined in accordance with OPS 1.550, multiplied by a factor of 1,15. (b) An 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, determined by using data acceptable to the Authority for these conditions, does not exceed the landing distance available. (c) A landing distance on a wet runway shorter than that required by subparagraph (a) above, but not less than that required by OPS 1.550 (a), may be used if the Aeroplane Flight Manual includes specific additional information about landing distances on wet runways. Landing — wet and contaminated runways. a) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be equal to or exceed the required landing distance, determined in accordance with CAT.POL.A.330, multiplied by a factor of 1,15. (b) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the landing distance shall not exceed the LDA. The operator shall specify in the operations manual the landing distance data to be applied. (c) A landing distance on a wet runway shorter than that required by (a), but not less than that required by CAT.POL.A.330(a), may be used if the AFM includes specific additional information about landing distances on wet runways.	OM-A 8.1.4.2			OK
1.555 (b) CAT.POL.A.335	An 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, determined by using data acceptable to the Authority for these conditions, does not exceed the landing distance available. Landing — wet and contaminated runways. a) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be equal to or exceed the required landing distance, determined in accordance with CAT.POL.A.330, multiplied by a factor of 1,15. (b)	OM-A 8.1.4.2	AC		OK

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the landing distance shall not exceed the LDA. The operator shall specify in the operations manual the landing distance data to be applied. (c) A landing distance on a wet runway shorter than that required by (a), but not less than that required by CAT.POL.A.330(a), may be used if the AFM includes specific additional information about landing distances on wet runways.				
1.550 (a) Appendix 1 CAT.POL.A.345	Steep Approach Procedures. (a) The Authority may approve the application of steep approach procedures using glide slope angles of 4,5° or more, and with screen heights of less than 50 ft but not less than 35 ft, provided that the following criteria are met: (1) the Aeroplane Flight Manual must state the maximum approved glide slope angle, any other limitations, normal, abnormal or emergency procedures for the steep approach as well as amendments to the field length data when using steep approach criteria; (2) a suitable glide path reference system, comprising at least a visual glide path indicating system, must be available at each aerodrome at which steep approach procedures are to be conducted; and (3) weather minima must be specified and approved for each runway to be used with a steep approach. Consideration must be given to the following: (i) the obstacle situation; (ii) the type of glide path reference and runway guidance such as visual aids, MLS, 3D–NAV, ILS, LLZ, VOR, NDB; (iii) the minimum visual reference to be required at DH and MDA; (iv) available airborne equipment; (v) pilot qualification and special aerodrome familiarisation; (vi) Aeroplane Flight Manual limitations and procedures; and (vii) missed approach criteria. Approval of steep approach operations. (a) Steep approach operations using glideslope angles of 4,5° or more and with screen heights of less than 60 ft, but not less than 35 ft, require prior approval by the competent authority. (b) To obtain the approval, the operator shall provide evidence that the following conditions are met: (1) the AFM states the maximum approved glideslope angle, any other limitations, normal, abnormal or emergency procedures for the steep approach as well as amendments to the field length data when using steep approach criteria; and (2) for each aerodrome at which steep approach operations are to be conducted: (i) a suitable glide path reference system, comprising at least a visual glide path indicating system, is available; (ii) weather minima are specified; and (iii) the following items are taken into consideration: (A) the obstacle situation; (B) the type of glide path	OM-C	AP		N

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	reference and runway guidance; (C) the minimum visual reference to be required at DH and MDA; (D) available airborne equipment; (E) pilot qualification and special aerodrome familiarisation; (F) AFM limitations and procedures; and (G) missed approach criteria.				
1.550 (a) Appendix 2 CAT.POL.A.350	Short Landing Operations.(a) For the purpose of OPS 1.550 (a)2., the distance used for the calculation of the permitted landing mass may consist of the usable length of the declared safe area plus the declared landing distance available. The Authority may approve such operations in accordance with the following criteria: (1) the use of the declared safe area must be approved by the aerodrome Authority; (2) the declared safe area must be clear of obstructions or depressions which would endanger an aeroplane under-shooting the runway, and no mobile object shall be permitted on the declared safe area while the runway is being used for short landing operations; (3) the slope of the declared safe area must not exceed 5 % upward slope nor 2 % downward slope in the direction of landing; (4) the usable length of the declared safe area under the provisions of this Appendix shall not exceed 90 metres; (5) the width of the declared safe area shall not be less than twice the runway width, centred on the extended runway centreline; (6) it is assumed that the crossing height over the beginning of the usable length of the declared safe area shall not be less than 50 ft; (7) for the purpose of this operation, the bearing strength requirement of OPS 1.480 (a)5. need not apply to the declared safe area; (8) weather minima must be specified and approved for each runway to be used and shall not be less than the greater of VFR or non precision approach minima; (9) pilot requirements must be specified (OPS 1.975 (a) refers); (10) the Authority may impose such additional conditions as are necessary for safe operation taking into account the aeroplane type characteristics, approach aids and missed approach/baulked landing considerations. Approval of short landing operations. (a) Short landing operations require prior approval by the competent authority. (b) To obtain the approval, the operator shall provide evidence that the following conditions are met: (1) the distance used for the calculation of the permitted landing mass may consist of the usable length of the declared safe area plus the declared LDA; (2) the use of the declared safe area is approved by the State of the aerodrome; (3) the declared safe area is clear of obstructions or depressions that would endanger an aeroplane undershooting the runway and no mobile object is permitted on the declared safe area while the runway is being used for short landing operations; (4) the slope of	OM-C	AP		N

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	the declared safe area does not exceed 5 % upward nor 2 % downward slope in the direction of landing; (5) the usable length of the declared safe area does not exceed 90 m; (6) the width of the declared safe area is not less than twice the runway width, centred on the extended runway centreline; (7) the crossing height over the beginning of the usable length of the declared safe area is not less than 50 ft; (8) weather minima are specified for each runway to be used and are not less than the greater of VFR or NPA minima; (9) pilot experience, training and special aerodrome familiarisation requirements are specified and met; (10) additional conditions, if specified by the competent authority, taking into account the aeroplane type characteristics, orographic characteristics in the approach area, available approach aids and missed approach/balked landing considerations.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 4.3	**Performance class C aeroplanes**				
1.1040 (l) ORO.MLR.100 (k)	An operator must ensure that the contents of the Performance are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.470 (c) Annex 1	Applicability. of nine or less, and a maximum take-off mass of 5 700 kg or less are operated in accordance with Subpart H (Performance Class B). REFERE TO RULE				
1.480 Annex 1	Terminology (definitions). REFERE TO RULE				
1.480 (a)(6) Annex 1	Maximum approved passenger seating configuration. The maximum passenger seating capacity of an individual aeroplane, excluding pilot seats or flight deck seats and cabin crew seats as applicable, used by the operator, approved by the Authority and specified in the Operations Manual. REFERE TO RULE		AP		
1.475 (a) CAT.POL.A.105	An operator shall ensure that the mass of the aeroplane: (1) at the start of the take-off; or, in the event of in-flight re-planning; (2) at the point from which the revised operational flight plan applies, is not greater than the mass at which the requirements of the appropriate Subpart can be complied with for the flight to be undertaken, allowing for expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is provided for in the particular requirement. (a) The mass of the aeroplane: (1) at the start of the take-off; or (2) in the event of in-flight replanning, at the point from which the revised operational flight plan applies,shall not be greater than the mass at which the requirements of the appropriate chapter can be complied with for the flight to be undertaken. Allowance may be made for expected reductions in mass as the flight proceeds and for fuel jettisoning. (b) The approved performance data contained in the AFM shall be used to determine compliance with the requirements of the appropriate chapter, supplemented as necessary with other data as prescribed in the relevant chapter.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	The operator shall specify other data in the operations manual. When applying the factors prescribed in the appropriate chapter, account may be taken of any operational factors already incorporated in the AFM performance data to avoid double application of factors. (c) Due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems that have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.				
1.475 (b) AMC1 CAT.POL.A.230	An operator shall ensure that the approved performance Data contained in the Aeroplane Flight Manual is used to deter- mine compliance with the requirements of the appropriate Subpart, supplemented as necessary with other data accept- able to the Authority as prescribed in the relevant Subpart. When applying the factors prescribed in the appropriate Subpart, account may be taken of any operational factors already incorporated in the Aeroplane Flight Manual performance data to avoid double application of factors. In those cases where the landing requires the use of an automatic landing system, and the distance published in the AFM includes safety margins equivalent to those contained in CAT.POL.A.230 (a)(1) and CAT.POL.A.235, the landing mass of the aeroplane should be the lesser of: (a) the landing mass determined in accordance with CAT.POL.A.230 (a)(1) or CAT.POL.A.235 as appropriate; or (b) the landing mass determined for the automatic landing distance for the appropriate surface condition, as given in the AFM or equivalent document. Increments due to system features such as beam location or elevations, or procedures such as use of overspeed, should also be included.		AC		
1.1045 Appendix 1 B 4.1.2 AMC3 ORO.MLR.100	If performance data, as required for the appropriate performance class, is not available in the approved AFM, then other data acceptable to the Authority must be included. Alternatively, the Operations Manual may contain cross- reference to the approved data contained in the AFM where such data is not likely to be used often or in an emergency. If performance data, as required for the appropriate performance class, is not available in the AFM, then other data should be included. The OM may contain cross-reference to the data contained in the AFM where such data is not likely to be used often or in an emergency.		AC		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.475 (e) CAT.POL.A.105	An operator shall take account of charting accuracy when assessing compliance with the take-off requirements of the applicable subpart. (a) The mass of the aeroplane: (1) at the start of the take-off; or (2) in the event of in-flight replanning, at the point from which the revised operational flight plan applies,shall not be greater than the mass at which the requirements of the appropriate chapter can be complied with for the flight to be undertaken. Allowance may be made for expected reductions in mass as the flight proceeds and for fuel jettisoning. (b) The approved performance data contained in the AFM shall be used to determine compliance with the requirements of the appropriate chapter, supplemented as necessary with other data as prescribed in the relevant chapter. The operator shall specify other data in the operations manual. When applying the factors prescribed in the appropriate chapter, account may be taken of any operational factors already incorporated in the AFM performance data to avoid double application of factors. (c) Due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems that have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.				
1.560 CAT.POL.A.105	An operator shall ensure that, for determining compliance with the requirements of this Subpart, the approved performance data in the Aeroplane Flight Manual is supplemented, as necessary, with other data acceptable to the Authority if the approved performance data in the Aeroplane Flight Manual is insufficient. (a) The mass of the aeroplane: (1) at the start of the take-off; or (2) in the event of in-flight replanning, at the point from which the revised operational flight plan applies,shall not be greater than the mass at which the requirements of the appropriate chapter can be complied with for the flight to be undertaken. Allowance may be made for expected reductions in mass as the flight proceeds and for fuel jettisoning. (b) The approved performance data contained in the AFM shall be used to determine compliance with the requirements of the appropriate chapter, supplemented as necessary with other data as prescribed in the relevant chapter. The operator shall specify other data in the operations manual. When applying the factors prescribed in the appropriate chapter, account may be taken of any operational factors already		AC		

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	incorporated in the AFM performance data to avoid double application of factors. (c) Due account shall be taken of aeroplane configuration, environmental conditions and the operation of systems that have an adverse effect on performance. (d) For performance purposes, a damp runway, other than a grass runway, may be considered to be dry. (e) The operator shall take account of charting accuracy when assessing the take-off requirements of the applicable chapters.				
1.1045 Appendix 1 B 4.0 AMC3 ORO.MLR.100	Performance data must be provided in a form in which it can be used without difficulty. Performance data should be provided in a form that can be used without difficulty.				
1.1045 Appendix 1 B 4.1 (a) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Take-off climb limits – Mass Altitude and Temperature Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of take-off climb limits – mass, altitude, temperature.				
1.1045 Appendix 1 B 4.1 (b) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Take-off field length of a dry, wet and contaminated runway; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of take-off field length (for dry, wet and contaminated runway conditions).				
1.1045 Appendix 1 B 4.1 (c) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Net flight path data for obstacle clearance calculation or, where applicable, take-off flight path; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of net flight path data for obstacle clearance calculation or, where applicable, take-off flight path.				
1.1045 Appendix 1 B 4.1 (d) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of The gradient losses for banked climb outs; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this				

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	performance data should be included to allow the determination of the gradient losses for banked climb-outs.				
1.1045 Appendix 1 B 4.1 (e) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of En-route climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of en-route climb limits.				
1.1045 Appendix 1 B 4.1 (f) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Approach climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of approach climb limits.				
1.1045 Appendix 1 B 4.1 (g) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Landing climb limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of landing climb limits.				
1.1045 Appendix 1 B 4.1 (h) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Landing field length of dry wet and contaminated runways, including the effects of an in-flight failure of a system or device, if it affects the landing distance; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of landing field length (for dry, wet and contaminated runway conditions) including the effects of an in-flight failure of a system or device, if it affects the landing distance.				
1.1045 Appendix 1 B 4.1 (i) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Brake energy limits; Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of brake energy limits.				

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1.1045 Appendix 1 B 4.1 (j) AMC3 ORO.MLR.100	Performance material must be included to allow the determination of Speeds applicable for the various flight stages (also considering wet or contaminated runways). Performance data. Performance material that provides the necessary data for compliance with the performance requirements prescribed in Annex IV (Part-CAT). For aeroplanes, this performance data should be included to allow the determination of speeds applicable for the various flight stages (also considering dry, wet and contaminated runway conditions).				
1.1045 Appendix 1 B 4.1.1 AMC3 ORO.MLR.100	Supplementary data covering flights in icing conditions. Any certificated performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative, must be included. Supplementary data covering flights in icing conditions. Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative.				
1.1045 Appendix 1 B 4.2 (a) AMC3 ORO.MLR.100	Additional performance data where applicable including all engine climb gradients; Additional performance data for aeroplanes. Additional performance data, where applicable, including all engine climb gradients.				
1.1045 Appendix 1 B 4.2 (b) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Drift-down data; Additional performance data for aeroplanes. Additional performance data, where applicable, including drift-down data.				
1.1045 Appendix 1 B 4.2 (c) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Effect of de-icing/anti-icing fluids; Additional performance data for aeroplanes. Additional performance data, where applicable, including effect of de-icing/anti-icing fluids.				
1.1045 Appendix 1 B 4.2 (d) AMC3 ORO.MLR.100	Additional performance data. Additional performance data where applicable including: Flight with landing gear down; Additional performance data for aeroplanes. Additional performance data, where applicable, including flight with landing gear down.				
1.565 (a) CAT.POL.A.400	An operator shall ensure that the take-off mass does not exceed the maximum take-off mass specified in the Aeroplane Flight Manual for the pressure altitude and the ambient temperature at the aerodrome at which the take-off is to be made. (a) The take-off mass shall not exceed the maximum take-off mass specified in the AFM for the pressure altitude and the ambient				

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	temperature at the aerodrome of departure. (b) For aeroplanes that have take-off field length data contained in their AFM that do not include engine failure accountability, the distance from the start of the take-off roll required by the aeroplane to reach a height of 50 ft above the surface with all engines operating within the maximum take-off power conditions specified, when multiplied by a factor of either: (1) 1,33 for aeroplanes having two engines; (2) 1,25 for aeroplanes having three engines; or (3) 1,18 for aeroplanes having four engines, shall not exceed the take-off run available (TORA) at the aerodrome at which the take-off is to be made. (c) For aeroplanes that have take-off field length data contained in their AFM which accounts for engine failure, the following requirements shall be met in accordance with the specifications in the AFM: (1) the accelerate-stop distance shall not exceed the ASDA; (2) the take-off distance shall not exceed the take-off distance available (TODA), with a clearway distance not exceeding half of the TORA; (3) the take-off run shall not exceed the TORA;EN L 296/96 Official Journal of the European Union 25.10.2012 (4) a single value of V 1 for the rejected and continued take-off shall be used; and (5) on a wet or contaminated runway the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions. (d) The following shall be taken into account: (1) the pressure altitude at the aerodrome; (2) the ambient temperature at the aerodrome; (3) the runway surface condition and the type of runway surface; (4) the runway slope in the direction of take-off; (5) not more that 50 % of the reported headwind component or not less than 150 % of the reported tailwind component; and (6) the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.				
1.565 (b) and (c) CAT.POL.A.400	An operator shall ensure that, for aeroplanes which have take-off field length data contained in their Aeroplane Flight Manuals that do not include engine failure accountability, the distance from the start of the take-off roll required by the aeroplane to reach a height of 50 ft above the surface with all engines operating within the maximum take-off power conditions specified, when multiplied by a factor of either: (1) 1,33 for aeroplanes having two engines; or (2) 1,25 for aeroplanes having three engines; or (3) 1,18 for aeroplanes having four engines, does not exceed the take-off run available at the aerodrome at which the take-off is to be made. (c) An operator shall ensure that, for aeroplanes which have take-off field length data contained in their Aeroplane Flight Manuals which accounts for engine failure, the following requirements are met in				

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	accordance with the specifications in the Aeroplane Flight Manual: (1) the accelerate-stop distance must not exceed the accelerate-stop distance available; (2) the take-off distance must not exceed the take-off distance available, with a clearway distance not exceeding half of the take-off run available; (3) the take-off run must not exceed the take-off run available; (4) compliance with this paragraph must be shown using a single value of V1 for the rejected and continued take-off; and (5) on a wet or contaminated runway the take-off mass must not exceed that permitted for a take-off on a dry run- way under the same conditions. (a) The take-off mass shall not exceed the maximum take-off mass specified in the AFM for the pressure altitude and the ambient temperature at the aerodrome of departure. (b) For aeroplanes that have take-off field length data contained in their AFM that do not include engine failure accountability, the distance from the start of the take-off roll required by the aeroplane to reach a height of 50 ft above the surface with all engines operating within the maximum take-off power conditions specified, when multiplied by a factor of either: (1) 1,33 for aeroplanes having two engines; (2) 1,25 for aeroplanes having three engines; or (3) 1,18 for aeroplanes having four engines, shall not exceed the take-off run available (TORA) at the aerodrome at which the take-off is to be made. (c) For aeroplanes that have take-off field length data contained in their AFM which accounts for engine failure, the following requirements shall be met in accordance with the specifications in the AFM: (1) the accelerate-stop distance shall not exceed the ASDA; (2) the take-off distance shall not exceed the take-off distance available (TODA), with a clearway distance not exceeding half of the TORA; (3) the take-off run shall not exceed the TORA;EN L 296/96 Official Journal of the European Union 25.10.2012 (4) a single value of V 1 for the rejected and continued take-off shall be used; and (5) on a wet or contaminated runway the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions. (d) The following shall be taken into account: (1) the pressure altitude at the aerodrome; (2) the ambient temperature at the aerodrome; (3) the runway surface condition and the type of runway surface; (4) the runway slope in the direction of take-off; (5) not more that 50 % of the reported headwind component or not less than 150 % of the reported tailwind component; and (6) the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.				

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1.565 (d) CAT.POL.A.400	(d) When showing compliance with subparagraphs (b) and (c) above, an operator must take account of the following: (1) the pressure altitude at the aerodrome; (2) the ambient temperature at the aerodrome; (3) the runway surface condition and the type of runway surface; (4) the runway slope in the direction of take-off; (5) not more that 50 % of the reported head-wind component or not less than 150 % of the reported tail-wind component; and (6) the loss, if any, of runway length due to alignment of the aeroplane prior to take-off. (a) The take-off mass shall not exceed the maximum take-off mass specified in the AFM for the pressure altitude and the ambient temperature at the aerodrome of departure. (b) For aeroplanes that have take-off field length data contained in their AFM that do not include engine failure accountability, the distance from the start of the take-off roll required by the aeroplane to reach a height of 50 ft above the surface with all engines operating within the maximum take-off power conditions specified, when multiplied by a factor of either: (1) 1,33 for aeroplanes having two engines; (2) 1,25 for aeroplanes having three engines; or (3) 1,18 for aeroplanes having four engines, shall not exceed the take-off run available (TORA) at the aerodrome at which the take-off is to be made. (c) For aeroplanes that have take-off field length data contained in their AFM which accounts for engine failure, the following requirements shall be met in accordance with the specifications in the AFM: (1) the accelerate-stop distance shall not exceed the ASDA; (2) the take-off distance shall not exceed the take-off distance available (TODA), with a clearway distance not exceeding half of the TORA; (3) the take-off run shall not exceed the TORA;EN L 296/96 Official Journal of the European Union 25.10.2012 (4) a single value of V 1 for the rejected and continued take-off shall be used; and (5) on a wet or contaminated runway the take-off mass shall not exceed that permitted for a take-off on a dry runway under the same conditions. (d) The following shall be taken into account: (1) the pressure altitude at the aerodrome; (2) the ambient temperature at the aerodrome; (3) the runway surface condition and the type of runway surface; (4) the runway slope in the direction of take-off; (5) not more that 50 % of the reported headwind component or not less than 150 % of the reported tailwind component; and (6) the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.				
AMC OPS 1.565 (d)(4)	Unless otherwise specified in the Aeroplane Flight Manual, or other performance or operating manuals from the manufacturers, the		AC		

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AMC2 CAT.POL.A.400	take-off distance should be increased by 5% for each 1% of upslope except that correction factors for runways with slopes in excess of 2% require the acceptance of the Authority. Unless otherwise specified in the AFM, or other performance or operating manuals from the manufacturers, the take-off distance should be increased by 5 % for each 1 % of upslope. However, correction factors for runways with slopes in excess of 2 % should only be applied when: (a) the operator has demonstrated to the competent authority that the necessary data in the AFM or the operations manual contain the appropriated procedures; and (b) the crew is trained to take-off on runways with slopes in excess of 2 %.				
1.570 (a) CAT.POL.A.405	An operator shall ensure that the take-off flight path with one engine inoperative clears all obstacles by a vertical distance of at least 50 ft plus 0,01 x D, or by a horizontal distance of at least 90 m plus 0,125 x D, where D is the horizontal distance the aeroplane has travelled from the end of the take-off distance available. For aeroplanes with a wingspan of less than 60 m a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m, plus 0,125 x D may be used. (a) The take-off flight path with OEI shall be determined such that the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component. (d) Track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for				

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	operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				
1.570 (b) CAT.POL.A.405	The take-off flight path must begin at a height of 50 ft above the surface at the end of the take-off distance required by OPS 1.565 (b) or (c) as applicable, and end at a height of 1500 ft above the surface. (a) The take-off flight path with OEI shall be determined such that the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component. (d) Track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°.				

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	greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				
1.570 (c) CAT.POL.A.405	When showing compliance with subparagraph (a), an operator must take account of the following: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported head-wind component or not less than 150 % of the reported tail-wind component. (a) The take-off flight path with OEI shall be determined such that the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported				

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	changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				
1.570 (d) CAT.POL.A.405	When showing compliance with subparagraph (a) above, track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25° may be scheduled. Adequate allowance must be made for the effect of bank angle on operating speeds and flight path including the distance increments resulting from increased operating speeds. (a) The take-off flight path with OEI shall be determined such that the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.				

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	405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component. (d) Track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				
1.570 (e) CAT.POL.A.405	When showing compliance with subparagraph (a) above for those cases which do not require track changes of more than 15°, an operator need not consider those obstacles which have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (a) The take-off flight path with OEI shall be determined such that the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a				

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	wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component. (d) Track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				
1.570 (f) CAT.POL.A.405	When showing compliance with subparagraph (a) above for those cases which do require track changes of more than 15°, an operator need not consider those obstacles which have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m for flights under all other conditions. (a) The take-off flight path with OEI shall be determined such that				

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	the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component. (d) Track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				
1.570 (g) CAT.POL.A.405	An operator shall establish contingency procedures to satisfy the requirements of OPS 1.570 and to provide a safe route, avoiding obstacles, to enable the aeroplane to eithercomply with the en-				

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	route requirements of OPS 1.580, or land at either the aerodrome of departure or at a take-off alternate aerodrome. (a) The take-off flight path with OEI shall be determined such that the aeroplane clears all obstacles by a vertical distance of at least 50 ft plus 0,01 × D, or by a horizontal distance of at least 90 m plus 0,125 × D, where D is the horizontal distance the aeroplane has travelled from the end of the TODA. For aeroplanes with a wingspan of less than 60 m, a horizontal obstacle clearance of half the aeroplane wingspan plus 60 m plus 0,125 × D may be used. (b) The take-off flight path shall begin at a height of 50 ft above the surface at the end of the take-off distance required by CAT.POL.A.405(b) or (c), as applicable, and end at a height of 1 500 ft above the surface. (c) When showing compliance with (a), the following shall be taken into account: (1) the mass of the aeroplane at the commencement of the take-off run; (2) the pressure altitude at the aerodrome; (3) the ambient temperature at the aerodrome; and (4) not more than 50 % of the reported headwind component or not less than 150 % of the reported tailwind component. (d) Track changes shall not be allowed up to that point of the take-off flight path where a height of 50 ft above the surface has been achieved. Thereafter, up to a height of 400 ft it is assumed that the aeroplane is banked by no more than 15°. Above 400 ft height bank angles greater than 15°, but not more than 25°, may be scheduled. Adequate allowance shall be made for the effect of bank angle on operating speeds and flight path, including the distance increments resulting from increased operating speeds. (e) For cases that do not require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 300 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 600 m, for flights under all other conditions. (f) For cases that do require track changes of more than 15°, the operator does not need to consider those obstacles that have a lateral distance greater than: (1) 600 m, if the pilot is able to maintain the required navigational accuracy through the obstacle accountability area; or (2) 900 m, for flights under all other conditions.EN 25.10.2012 Official Journal of the European Union L 296/97 (g) The operator shall establish contingency procedures to satisfy (a) to (f) and to provide a safe route, avoiding obstacles, to enable the aeroplane to either comply with the en-route requirements of CAT.POL.A.410, or land at either the aerodrome of departure or at a take-off alternate aerodrome.				

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1.575 CAT.POL.A.410	En-Route – All Engines Operating.An operator shall ensure that the aeroplane will, in the meteorological conditions expected for the flight, at any point on its route or on any planned diversion therefrom, be capable of a rate of climb of at least 300 ft per minute with all engines operating within the maximum continuous power conditions specified at: (1) the minimum altitudes for safe flight on each stage of the route to be flown or of any planned diversion therefrom specified in, or calculated from the information contained in, the Operations Manual relating to the aeroplane; and (2) the minimum altitudes necessary for compliance with the conditions prescribed in OPS 1.580 and 1.585, as appropriate. In the meteorological conditions expected for the flight, at any point on its route or on any planned diversion therefrom, the aeroplane shall be capable of a rate of climb of at least 300 ft per minute with all engines operating within the maximum continuous power conditions specified at: (1) the minimum altitudes for safe flight on each stage of the route to be flown, or of any planned diversion therefrom, specified in or calculated from the information contained in the operations manual relating to the aeroplane; and (2) the minimum altitudes necessary for compliance with the conditions prescribed in CAT.POL.A.415 and 420, as appropriate.				
1.580 CAT.POL.A.415	En-Route – One Engine Inoperative. (a) An operator shall ensure that the aeroplane will, in the meteorological conditions expected for the flight, in the event of any one engine becoming inoperative at any point on its route or on any planned diversion therefrom and with the other engine or engines operating within the maximum continuous power conditions specified, be capable of continuing the flight from the cruising altitude to an aerodrome where a landing can be made in accordance with OPS 1.595 or OPS 1.600 as appropriate, clearing obstacles within 9,3 km (5 nm) either side of the intended track by a vertical interval of at least: (1) 1 000 ft when the rate of climb is zero or greater; or (2) 2 000 ft when the rate of climb is less than zero. (b) The flight path shall have a positive slope at an altitude of 450 m (1 500 ft) above the aerodrome where the landing is assumed to be made after the failure of one engine. (c) For the purpose of this subparagraph the available rate of climb of the aeroplane shall be taken to be 150 ft per minute less than the gross rate of climb specified. (d) When showing compliance with this paragraph, an operator must increase the width margins of subparagraph (a) above to 18,5 km (10 nm) if the navigational accuracy does not meet the 95 % containment level. (e) Fuel jettisoning is permitted to an extent				

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	consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used. (a) In the meteorological conditions expected for the flight, in the event of any one engine becoming inoperative at any point on its route or on any planned diversion therefrom and with the other engine(s) operating within the maximum continuous power conditions specified, the aeroplane shall be capable of continuing the flight from the cruising altitude to an aerodrome where a landing can be made in accordance with CAT.POL.A.430 or CAT.POL.A.435, as appropriate. The aeroplane shall clear obstacles within 9,3 km (5 NM) either side of the intended track by a vertical interval of at least: (1) 1 000 ft, when the rate of climb is zero or greater; or (2) 2 000 ft, when the rate of climb is less than zero. (b) The flight path shall have a positive slope at an altitude of 450 m (1 500 ft) above the aerodrome where the landing is assumed to be made after the failure of one engine. (c) The available rate of climb of the aeroplane shall be taken to be 150 ft per minute less than the gross rate of climb specified. (d) The width margins of (a) shall be increased to 18,5 km (10 NM) if the navigational accuracy does not meet at least RNP5. (e) Fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is				
1.585 CAT.POL.A.420	En-Route – Aeroplanes With Three Or More Engines, Two Engines Inoperative. (a) An operator shall ensure that, at no point along the intended track, will an aeroplane having three or more engines be more than 90 minutes at the all-engine long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met unless it complies with subparagraphs (b) to (e) below. (b) The two-engines inoperative flight path shown must permit the aeroplane to continue the flight, in the expected meteorological conditions, clearing all obstacles within 9,3 km (5 nm) either side of the intended track by a vertical interval of at least 2 000 ft, to an aerodrome at which the performance requirements applicable at the expected landing mass are met. (c) The two engines are assumed to fail at the most critical point of that portion of the route where the aeroplane is more than 90 minutes, at the all engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met. (d) The expected mass of the aeroplane at the point where the two engines are assumed to fail must not be less than that which would				

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	include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at an altitude of a least 450 m (1 500 ft) directly over the landing area and thereafter to fly level for 15 minutes. (e) For the purpose of this subparagraph the available rate of climb of the aeroplane shall be taken to be 150 ft per minute less than that specified. (f) When showing compliance with this paragraph, an operator must increase the width margins of subparagraph (a) above to 18,5 km (10 nm) if the navigational accuracy does not meet the 95 % containment level. (g) Fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used. (a) At no point along the intended track shall an aeroplane having three or more engines be more than 90 minutes, at the all-engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met, unless it complies with (b) to (e). (b) The two-engines-inoperative flight path shall permit the aeroplane to continue the flight, in the expected meteorological conditions, clearing all obstacles within 9,3 km (5 NM) either side of the intended track by a vertical interval of at least 2 000 ft, to an aerodrome at which the performance requirements applicable at the expected landing mass are met. (c) The two engines are assumed to fail at the most critical point of that portion of the route where the aeroplane is more than 90 minutes, at the all-engines long range cruising speed at standard temperature in still air, away from an aerodrome at which the performance requirements applicable at the expected landing mass are met. (d) The expected mass of the aeroplane at the point where the two engines are assumed to fail shall not be less than that which would include sufficient fuel to proceed to an aerodrome where the landing is assumed to be made, and to arrive there at an altitude of a least 450 m (1 500 ft) directly over the landing area and thereafter to fly level for 15 minutes. (e) The available rate of climb of the aeroplane shall be taken to be 150 ft per minute less than that specified. (f) The width margins of (b) shall be increased to 18,5 km (10 NM) if the navigational accuracy does not meet at least RNP5. (g) Fuel jettisoning is permitted to an extent consistent with reaching the aerodrome with the required fuel reserves, if a safe procedure is used.				
1.590 CAT.POL.A.425	An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475 (a) does not exceed the				

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	maximum landing mass specified in the Aeroplane Flight Manual for the altitude and, if accounted for in the Aeroplane Flight Manual, the ambient temperature expected for the estimated time of landing at the destination and alternate aerodrome. The landing mass of the aeroplane determined in accordance with CAT.POL.A.105(a) shall not exceed the maximum landing mass specified in the AFM for the altitude and, if accounted for in the AFM, the ambient temperature expected for the estimated time of landing at the destination aerodrome and alternate aerodrome.				
1.595 CAT.POL.A.430	Landing – Dry Runways.(a) An operator shall ensure that the landing mass of the aeroplane determined in accordance with OPS 1.475 (a) for the estimated time of landing allows a full stop landing from 50 ft above the threshold within 70 % of the landing distance available at the destination and any alternate aerodrome. (b) When showing compliance with subparagraph (a) above, an operator must take account of the following: (1) the altitude at the aerodrome; (2) not more than 50 % of the head-wind component or not less than 150 % of the tailwind component; (3) the type of runway surface; and (4) the slope of the runway in the direction of landing. (c) For despatching an aeroplane in accordance with subparagraph (a) above it must be assumed that: (1) the aeroplane will land on the most favourable runway in still air; and (2) the aeroplane will land on the runway most likely to be assigned considering the probable wind speed and direction and the ground handling characteristics of the aeroplane, and considering other conditions such as landing aids and terrain. (d) If an operator is unable to comply with subparagraph (c)2 above for the destination aerodrome, the aeroplane may be despatched if an alternate aerodrome is designated which permits full compliance with subparagraphs (a), (b) and (c). (a) The landing mass of the aeroplane determined in accordance with CAT.POL.A.105(a) for the estimated time of landing at the destination aerodrome and any alternate aerodrome shall allow a full stop landing from 50 ft above the threshold within 70 % of the LDA taking into account: (1) the altitude at the aerodrome; (2) not more than 50 % of the headwind component or not less than 150 % of the tailwind component; (3) the type of runway surface; and (4) the slope of the runway in the direction of landing. (b) For dispatching the aeroplane it shall be assumed that: (1) the aeroplane will land on the most favourable runway in still air; and (2) the aeroplane will land on the runway most likely to be assigned considering the probable wind speed and direction, the ground				

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	handling characteristics of the aeroplane and other conditions such as landing aids and terrain. (c) If the operator is unable to comply with (b)(2) for the destination aerodrome, the aeroplane				
1.600 (a) and (b) CAT.POL.A.435	Landing – Wet and Contaminated Runways. (a) An 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 equal to or exceeds the required landing distance, determined in accordance with OPS 1.595, multiplied by a factor of 1,15. (b) An 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 determined by using data acceptable to the Authority for these conditions, does not exceed the landing distance available. (a) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be wet, the LDA shall be equal to or exceed the required landing distance, determined in accordance with CAT.POL.A.430, multiplied by a factor of 1,15. (b) When the appropriate weather reports and/or forecasts indicate that the runway at the estimated time of arrival may be contaminated, the landing distance shall not exceed the LDA. The operator shall specify in the operations manual the landing distance data to be applied.		AC		

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PART B 5	**. FLIGHT PLANNING**				
1.1040 (l) ORO.MLR.100(k)	An operator must ensure that the contents of the Flight Planning are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.290 (a) CAT.OP.MPA.175	An operator shall ensure that an operational flight plan is completed for each intended flight. (a) An operational flight plan shall be completed for each intended flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes/ operating sites concerned. (b) The flight shall not be commenced unless the commander is satisfied that: (1) all items stipulated in 2.a.3 of Annex IV to Regulation (EC) No 216/2008 concerning the airworthiness and registration of the aircraft, instrument and equipment, mass and centre of gravity (CG) location, baggage and cargo and aircraft operating limitations can be complied with; (2) the aircraft is not operated contrary to the provisions of the configuration deviation list (CDL); (3) the parts of the operations manual that are required for the conduct of the flight are available; (4) the documents, additional information and forms required to be available by CAT.GEN.MPA.180 are on board; (5) current maps, charts and associated documentation or equivalent data are available to cover the intended operation of the aircraft including any diversion that may reasonably be expected; (6) ground facilities and services required for the planned flight are available and adequate; (7) the provisions specified in the operations manual in respect of fuel, oil, oxygen, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes, where required, can be complied with for the planned flight; and (8) any additional operational limitation can be complied with. (c) Notwithstanding (a), an operational flight plan is not required for operations under VFR of: (1) other-than-complex motor-powered aeroplane taking off and landing at the same aerodrome or operating site; or (2) helicopters with an MCTOM of 3 175 kg or less, by day and over routes				

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	navigated by reference to visual landmarks in a local area as specified in the operations manual.				
1.1045 Appendix 1 B 5.1 AMC3 ORO.MLR.100	Data and instructions necessary for pre-flight and in-flight planning including factors such as speed schedules and power settings. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine- inoperative cruise speed and maximum distance to an adequate aerodrome determined in accordance with OPS 1.245) and flights to isolated aerodromes must be included. Data and instructions necessary for pre-flight and in-flight planning including, for aeroplanes, factors such as speed schedules and power settings. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine-inoperative cruise speed and maximum distance to an adequate aerodrome determined in accordance with Annex IV (Part-CAT)) and flights to isolated aerodromes should be included.				
1.300 CAT.OP.MPA.190	An operator shall ensure that a flight is not commenced unless an ATS flight plan has been submitted, or adequate information has been deposited in order to permit alerting services to be activated if required. (a) If an ATS flight plan is not submitted because it is not required by the rules of the air, adequate information shall be deposited in order to permit alerting services to be activated if required. (b) When operating from a site where it is impossible to submit an ATS flight plan, the ATS flight plan shall be transmitted as soon as possible after take-off by the commander or the operator.				
1.1045 Appendix 1 B 5.1 AMC3 ORO.MLR.100	Data and instructions necessary for pre-flight and in-flight planning including factors such as speed schedules and power settings. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine- inoperative cruise speed and maximum distance to an adequate aerodrome determined in accordance with OPS 1.245) and flights to isolated aerodromes must be included. Data and instructions necessary for pre-flight and in-flight planning including, for aeroplanes, factors such as speed schedules and power settings. Where applicable, procedures for engine(s)-out operations, ETOPS (particularly the one-engine-inoperative cruise speed and maximum distance to an adequate aerodrome determined in accordance with Annex IV (Part-CAT)) and flights to isolated aerodromes should be included.				

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1.135 (a) (1) CAT.GEN.MPA.180	An operator shall ensure that, in addition to the documents and manuals prescribed in OPS 1.125 and OPS 1.130, the following information and forms, relevant to the type and area of operation, are carried on each flight: (1) Operational Flight Plan containing at least the information required in OPS 1.1060; (a) The following documents, manuals and information shall be carried on each flight, as originals or copies unless otherwise specified: (1) the aircraft flight manual (AFM), or equivalent document(s); (2) the original certificate of registration; (3) the original certificate of airworthiness (CofA); (4) the noise certificate, including an English translation, where one has been provided by the authority responsible for issuing the noise certificate; (5) a certified true copy of the air operator certificate (AOC); (6) the operations specifications relevant to the aircraft type, issued with the AOC; (7) the original aircraft radio licence, if applicable; (8) the third party liability insurance certificate(s); (9) the journey log, or equivalent, for the aircraft; (10) the aircraft technical log, in accordance with Annex I (Part-M) to Regulation (EC) No 2042/2003; (11) details of the filed ATS flight plan, if applicable; (12) current and suitable aeronautical charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted; (13) procedures and visual signals information for use by intercepting and intercepted aircraft; (14) information concerning search and rescue services for the area of the intended flight, which shall be easily accessible in the flight crew compartment; (15) the current parts of the operations manual that are relevant to the duties of the crew members, which shall be easily accessible to the crew members; (16) the MEL; (17)				

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	appropriate notices to airmen (NOTAMs) and aeronautical information service (AIS) briefing documentation; (18) appropriate meteorological information; (19) cargo and/or passenger manifests, if applicable; (20) mass and balance documentation; (21) the operational flight plan, if applicable; (22) notification of special categories of passenger (SCPs) and special loads, if applicable; and (23) any other documentation that may be pertinent to the flight or is required by the States concerned with the flight. (b) Notwithstanding (a), for operations under visual flight rules (VFR) by day with other-than-complex motor-powered aircraft taking off and landing at the same aerodrome or operating site within 24 hours, or remaining within a local area specified in the operations manual, the following documents and information may be retained at the aerodrome or operating site instead: (1) noise certificate; (2) aircraft radio licence; (3) journey log, or equivalent; (4) aircraft technical log; (5) NOTAMs and AIS briefing documentation; (6) meteorological information; (7) notification of SCPs and special loads, if applicable; and (8) mass and balance documentation. (c) Notwithstanding (a), in case of loss or theft of documents specified in (a)(2) to (a)(8), the operation may continue until the flight reaches its destination or a place where replacement documents can be provided.				
1.140 (b)(1) CAT.GEN.MPA.185	The information referred to in subparagraph (a) above includes: (1) a copy of the operational flight plan where appropriate; (2) copies of the relevant part(s) of the aeroplane technical log; (3) route specific NOTAM documentation if specifically edited by the operator; (4) mass and balance documentation if required (OPS 1.625 refers); and (5) special loads notification. (a) The operator shall ensure that at least for the duration of each flight or series of flights: (1) information relevant to the flight and appropriate for the type of operation is preserved on the ground; (2) the information is retained until it has been duplicated at the place at which it will be stored; or, if this is impracticable (3) the same information is carried in a fireproof container in the aircraft. (b) The information referred to in (a) includes: (1) a copy of the operational flight plan, where appropriate; (2) copies of the relevant part(s) of the aircraft technical log; (3) route-specific NOTAM documentation if specifically edited by the operator; (4) mass and balance documentation if required; and (5) special loads notification.EN 25.10.2012 Official Journal of the European Union L 296/67				
1.1060 (a) and (b) CAT.GEN.MPA.1	(a) An operator must ensure that the operational flight plan used and the entries made during flight contain the following items: (1)				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
50	aeroplane registration; (2) aeroplane type and variant; (3) date of flight; (4) flight identification; (5) names of flight crew members; (6) duty assignment of flight crew members; (7) place of departure; (8) time of departure (actual off-block time, take-off time); (9) place of arrival (planned and actual); (10) time of arrival (actual landing and on-block time); (11) type of operation (ETOPS, VFR, Ferry flight, etc.) (12) route and route segments with checkpoints/waypoints, distances, time and tracks; (13) planned cruising speed and flying times between check-points/waypoints. Estimated and actual times overhead; (14) safe altitudes and minimum levels; (15) planned altitudes and flight levels; (16) fuel calculations (records of in-flight fuel checks); (17) fuel on board when starting engines; (18) alternate(s) for destination and, where applicable, take-off and en-route, including information required in sub- paragraphs 12, 13, 14, and 15 above; (19) initial ATS flight plan clearance and subsequent re-clearance; (20) in-flight re-planning calculations; and (21) relevant meteorological information. (b) Items which are readily available in other documentation or from another acceptable source or are irrelevant to the type of operation may be omitted from the operational flight plan. The operator shall only operate an aeroplane with a passenger seating configuration of more than 30 on overwater flights at a distance from land suitable for making an emergency landing, greater than 120 minutes at cruising speed, or 400 NM, whichever is less, if the aeroplane complies with the ditching provisions prescribed in the applicable airworthiness code.				
1.1060 (c) AMC1 CAT.OP.MPA.175(a)	An operator must ensure that the operational flight plan and its use are described in the Operations Manual. (a) The operational flight plan used and the entries made during flight should contain the following items: (1) aircraft registration; (2) aircraft type and variant; (3) date of flight; (4) flight identification; (5) names of flight crew members; (6) duty assignment of flight crew members; (7) place of departure; (8) time of departure (actual off-block time, take-off time); (9) place of arrival (planned and actual); (10) time of arrival (actual landing and on-block time); (11) type of operation (ETOPS, VFR, ferry flight, etc.); (12) route and route segments with checkpoints/waypoints, distances, time and tracks; (13) planned cruising speed and flying times between check-points/waypoints (estimated and actual times overhead); (14) safe altitudes and minimum levels; (15) planned altitudes and flight levels; (16) fuel calculations (records of in-flight fuel checks); (17) fuel on board when starting engines; (18) alternate(s) for				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	destination and, where applicable, take-off and en-route, including information required in (a)(12) to (15); (19) initial ATS flight plan clearance and subsequent reclearance; (20) in-flight replanning calculations; and (21) relevant meteorological information. (b) Items that are readily available in other documentation or from another acceptable source or are irrelevant to the type of operation may be omitted from the operational flight plan. (c) The operational flight plan and its use should be described in the operations manual. (d) All entries on the operational flight plan should be made concurrently and be permanent in nature. OPERATIONAL FLIGHT PLAN - OTHER-THAN-COMPLEX MOTOR-POWERED AIRCRAFT OPERATIONS AND LOCAL OPERATIONS An operational flight plan may be established in a simplified form relevant to the kind of operation for operations with other-than-complex motor-powered aircraft as well as local operations with any aircraft.				
1.1060 (d) AMC1 CAT.OP.MPA.175(a)	An operator shall ensure that all entries on the operational flight plan are made concurrently and that they are permanent in nature. (a) The operational flight plan used and the entries made during flight should contain the following items: (1) aircraft registration; (2) aircraft type and variant; (3) date of flight; (4) flight identification; (5) names of flight crew members; (6) duty assignment of flight crew members; (7) place of departure; (8) time of departure (actual off-block time, take-off time); (9) place of arrival (planned and actual); (10) time of arrival (actual landing and on-block time); (11) type of operation (ETOPS, VFR, ferry flight, etc.); (12) route and route segments with checkpoints/waypoints, distances, time and tracks; (13) planned cruising speed and flying times between check-points/waypoints (estimated and actual times overhead); (14) safe altitudes and minimum levels; (15) planned altitudes and flight levels; (16) fuel calculations (records of in-flight fuel checks); (17) fuel on board when starting engines; (18) alternate(s) for destination and, where applicable, take-off and en-route, including information required in (a)(12) to (15); (19) initial ATS flight plan clearance and subsequent reclearance; (20) in-flight replanning calculations; and (21) relevant meteorological information. (b) Items that are readily available in other documentation or from another acceptable source or are irrelevant to the type of operation may be omitted from the operational flight plan. (c) The operational flight plan and its use should be described in the operations manual. (d) All entries on the operational flight plan should be made concurrently and be permanent in nature. OPERATIONAL FLIGHT				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	PLAN - OTHER-THAN-COMPLEX MOTOR-POWERED AIRCRAFT OPERATIONS AND LOCAL OPERATIONS An operational flight plan may be established in a simplified form relevant to the kind of operation for operations with other-than-complex motor-powered aircraft as well as local operations with any aircraft.				
1.295 (b) CAT.OP.MPA.180	An operator must select and specify in the operational flight plan a take-off alternate aerodrome if it would not be possible to return to the departure aerodrome for meteorological or performance reasons. The take-off alternate aerodrome, in relation to the departure aerodrome, shall be located within: (1) for two-engined aeroplanes, either: (i) one hour flight time at a one-engine-inoperative cruising speed according to the Aircraft Flight Manual (AFM) in still air standard conditions based on the actual take-off mass; or (ii) the operator's approved ETOPS diversion time, subject to any MEL restriction, up to a maximum of two hours, at the one-engine-inoperative cruising speed according to the AFM in still air standard conditions based on the actual take-off mass for aeroplanes and crews authorised for ETOPS; or (2) two hours flight time at a one-engine-inoperative cruising speed according to the AFM in still air standard conditions based on the actual take-off mass for three and fourengined aeroplanes; and (3) if the AFM does not contain a one-engine-inoperative cruising speed, the speed to be used for calculation must be that which is achieved with the remaining engine(s) set at maximum continuous power. (a) Where it is not possible to use the departure aerodrome as a take-off alternate aerodrome due to meteorological or performance reasons, the operator shall select another adequate take-off alternate aerodrome that is no further from the departure aerodrome than: (1) for two-engined aeroplanes: (i) one hour flying time at an OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; or (ii) the ETOPS diversion time approved in accordance with Annex V (Part-SPA), Subpart F, subject to any MEL restriction, up to a maximum of two hours, at the OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; (2) for three and four-engined aeroplanes, two hours flying time at the OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass. If the AFM does not contain an OEI cruising speed, the speed to be used for calculation shall be that which is achieved with the remaining engine(s) set at maximum continuous power. (b) The operator shall select at least				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	one destination alternate aerodrome for each instrument flight rules (IFR) flight unless the destination aerodrome is an isolated aerodrome or: (1) the duration of the planned flight from take-off to landing or, in the event of in-flight replanning in accordance with CAT.OP.MPA.150(d), the remaining flying time to destination does not exceed six hours; and (2) two separate runways are available and usable at the destination aerodrome and the appropriate weather reports and/or forecasts for the destination aerodrome indicate that, for the period from one hour before until one hour after the expected time of arrival at the destination aerodrome, the ceiling will be at least 2 000 ft or circling height + 500 ft, whichever is greater, and the ground visibility will be at least 5 km.(c) The operator shall select two destination alternate aerodromes when: (1) the appropriate weather reports and/or forecasts for the destination aerodrome 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 (2) no meteorological information is available. (d) The operator shall specify any required alternate aerodrome(s) in the operational flight plan.				
1.295 (c) CAT.OP.MPA.180	An operator must select at least one destination alternate for each IFR flight unless: (1) both: (i) the duration of the planned flight from take-off to landing or, in the event of inflight re-planning in accordance with OPS 1.255(d), the remaining flying time to destination does not exceed six hours, and (ii) two separate runways (see OPS 1.192) are available and usable at the destination aerodrome and the appropriate weather reports or forecasts for the destination aerodrome, or any combination thereof, indicate that for the periodfrom one hour before until one hour after the expected time of arrival at the destination aerodrome, the ceiling will be at least 2 000 ft or circling height + 500 ft, whichever is greater, and the visibility will be at least 5 km; or (2) the destination aerodrome is isolated. (a) Where it is not possible to use the departure aerodrome as a take-off alternate aerodrome due to meteorological or performance reasons, the operator shall select another adequate take-off alternate aerodrome that is no further from the departure aerodrome than: (1) for two-engined aeroplanes: (i) one hour flying time at an OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; or (ii) the ETOPS diversion time approved in accordance with Annex V (Part-SPA), Subpart F, subject to any MEL restriction, up to a maximum				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	of two hours, at the OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; (2) for three and four-engined aeroplanes, two hours flying time at the OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass. If the AFM does not contain an OEI cruising speed, the speed to be used for calculation shall be that which is achieved with the remaining engine(s) set at maximum continuous power. (b) The operator shall select at least one destination alternate aerodrome for each instrument flight rules (IFR) flight unless the destination aerodrome is an isolated aerodrome or: (1) the duration of the planned flight from take-off to landing or, in the event of in-flight replanning in accordance with CAT.OP.MPA.150(d), the remaining flying time to destination does not exceed six hours; and (2) two separate runways are available and usable at the destination aerodrome and the appropriate weather reports and/or forecasts for the destination aerodrome indicate that, for the period from one hour before until one hour after the expected time of arrival at the destination aerodrome, the ceiling will be at least 2 000 ft or circling height + 500 ft, whichever is greater, and the ground visibility will be at least 5 km.(c) The operator shall select two destination alternate aerodromes when: (1) the appropriate weather reports and/or forecasts for the destination aerodrome 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 (2) no meteorological information is available. (d) The operator shall specify any required alternate aerodrome(s) in the operational flight plan.				
1.295 (d) CAT.OP.MPA.180	An operator must select two destination alternate aerodromes when: (1) 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 (see OPS 1.297(b)); or (2) no meteorological information is available. (a) Where it is not possible to use the departure aerodrome as a take-off alternate aerodrome due to meteorological or performance reasons, the operator shall select another adequate take-off alternate aerodrome that is no further from the departure aerodrome than: (1) for two-engined aeroplanes: (i) one hour flying time at an OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; or (ii) the				

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	ETOPS diversion time approved in accordance with Annex V (Part-SPA), Subpart F, subject to any MEL restriction, up to a maximum of two hours, at the OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass; (2) for three and four-engined aeroplanes, two hours flying time at the OEI cruising speed according to the AFM in still air standard conditions based on the actual take-off mass. If the AFM does not contain an OEI cruising speed, the speed to be used for calculation shall be that which is achieved with the remaining engine(s) set at maximum continuous power. (b) The operator shall select at least one destination alternate aerodrome for each instrument flight rules (IFR) flight unless the destination aerodrome is an isolated aerodrome or: (1) the duration of the planned flight from take-off to landing or, in the event of in-flight replanning in accordance with CAT.OP.MPA.150(d), the remaining flying time to destination does not exceed six hours; and (2) two separate runways are available and usable at the destination aerodrome and the appropriate weather reports and/or forecasts for the destination aerodrome indicate that, for the period from one hour before until one hour after the expected time of arrival at the destination aerodrome, the ceiling will be at least 2 000 ft or circling height + 500 ft, whichever is greater, and the ground visibility will be at least 5 km.(c) The operator shall select two destination alternate aerodromes when: (1) the appropriate weather reports and/or forecasts for the destination aerodrome 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 (2) no meteorological information is available. (d) The operator shall specify any required alternate aerodrome(s) in the operational flight plan.				
1.297 CAT.OP.MPA.185	Planning minima for IFR flights. (a) Planning minima for a take-off alternate aerodrome. An operator shall only select an aerodrome as a take-off alternate aerodrome when 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 specified in accordance with OPS 1.225. The ceiling must be taken into account when the only approaches available are non-precision and/or circling approaches. Any limitation related to one-engine-inoperative operations must be taken into account. (b) Planning minima for a destination aerodrome (except isolated destination				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	aerodromes). An operator shall only select the destination aerodrome and when: (1) 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: (i) RVR/visibility specified in accordance with OPS 1.225; and (ii) For a non-precision approach or a circling approach, the ceiling at or above MDH; or (2) two destination alternate aerodromes are selected under OPS 1.295(d). (a) Planning minima for a take-off alternate aerodrome. The operator shall only select an aerodrome as a take-off alternate aerodrome when the appropriate weather reports and/or forecasts 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 specified in accordance with CAT.OP.MPA.110. The ceiling shall be taken into account when the only approach operations available are non-precision approaches (NPA) and/or circling operations. Any limitation related to OEI operations shall be taken into account. (b) Planning minima for a destination aerodrome other than an isolated destination aerodrome The operator shall only select the destination aerodrome when: (1) the appropriate weather reports and/or forecasts 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: (i) RVR/visibility (VIS) specified in accordance with CAT.OP.MPA.110; and (ii) for an NPA or a circling operation, the ceiling at or above MDH; or (2) two destination alternate aerodromes are selected. (c) Planning minima for a destination alternate aerodrome, isolated aerodrome, fuel en-route alternate (fuel ERA) aerodrome, en-route alternate (ERA) aerodrome The operator shall only select an aerodrome for one of these purposes when the appropriate weather reports and/or forecasts 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				
1.1045 Appendix 1 B 5.2 and 1.255 AMC3 ORO.MLR.100 and CAT.O	The method for calculating fuel needed for the various stages of flight, in accordance with OPS 1.255. (a) An operator must establish a fuel policy for the purpose of flight planning and in-flight replanning to ensure that every flight carries sufficient fuel for the		AP		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
P.MPA.150	planned operation and reserves to cover deviations from the planned operation. (b) An operator shall ensure that the planning of flights is at least based upon 1. and 2. below: (1) Procedures contained in the Operations Manual and data derived from: (i) data provided by the aeroplane manufacturer; or (ii) current aeroplane specific data derived from a fuel consumption monitoring system. (2) 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; and (iv) air navigation services provider(s) procedures and restrictions. (c) An operator shall ensure that the pre-flight calculation of usable fuel required for a flight includes: (1) Taxi fuel; and (2) Trip fuel; and (3) Reserve fuel consisting of: (i) contingency fuel (see OPS 1.192); and (ii) alternate fuel, if a destination alternate aerodrome is required. (This does not preclude selection of the departure aerodrome as the destination alternate aerodrome); and (iii) final reserve fuel; and (iv) additional fuel, if required by the type of operation (e.g. ETOPS); and (4) extra fuel if required by the commander. The method for calculating fuel needed for the various stages of flight. (a) The operator 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 reserves to cover deviations from the planned operation. The fuel policy and any change to it require prior approval by the competent authority. (b) The operator shall ensure that the planning of flights is based upon at least: (1) procedures contained in the operations manual and: (i) data provided by the aircraft manufacturer; or (ii) current aircraft-specific data derived from a fuel consumption monitoring system; and (2) the operating conditions under which the flight is to be conducted including: (i) aircraft fuel consumption data; (ii) anticipated masses; (iii) expected meteorological conditions; and (iv) air navigation services provider(s) procedures and restrictions. (c) The operator shall ensure that the pre-flight calculation of usable fuel required for a flight includes: (1) taxi fuel; (2) trip fuel; (3) reserve fuel consisting of: (i) contingency fuel; (ii) alternate fuel, if a destination alternate aerodrome is required; (iii) final reserve fuel; and (iv) additional fuel, if required by the type of operation; and (4) extra fuel if required by the commander. (d) 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 aerodrome other than originally planned includes:				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	(1) trip fuel for the remainder of the flight; and (2) reserve fuel consisting of: (i) contingency fuel; (ii) alternate fuel, if a destination alternate aerodrome is required; (iii) final reserve fuel; and (iv) additional fuel, if required by the type of operation; and (3) extra fuel if required by the commander.				
1.1045 Appendix 1 B 5.3 AMC3 ORO.MLR.100	Performance Data for ETOPS Critical Fuel Reserve and Area of Operation including sufficient data to support the critical fuel reserve and area of operation calculation based on Approved Aeroplane Performance Data. The following data is required: (a) Detailed engine(s) inoperative performance data including fuel flow for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) drift down (includes net performance) see OPS 1.505 where applicable; (ii) cruise altitude coverage including 10 000 feet; (iii) holding; (iv) altitude capability (includes net performance); and (v) missed approach. (b) Detailed all-engine-operating performance data, including nominal fuel flow data, for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) cruise (altitude coverage including 10 000 feet); and (ii) holding. (c) Details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aeroplane, ram air turbine (RAT) deployment, thrust-reverser deployment, etc. The altitudes, airspeeds, thrust settings, and fuel flow used in establishing the ETOPS area of operations for each airframe-engine combination must be used in showing the corresponding terrain and obstruction clearances in accordance with this regulation. When applicable, for aeroplanes, performance data for ETOPS critical fuel reserve and area of operation, including sufficient data to support the critical fuel reserve and area of operation calculation based on approved aircraft performance data. The following data should be included: (a) detailed engine(s)-inoperative performance data including fuel flow for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) drift down (includes net performance), where applicable; (ii) cruise altitude coverage including 10 000 ft; (iii) holding; (iv) altitude capability (includes net performance); and (v) missed approach; (b) detailed all-engine-operating performance data, including nominal fuel flow data, for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) cruise (altitude				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	coverage including 10 000 ft); and (ii) holding; (c) details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aircraft, ram air turbine (RAT) deployment, thrust-reverser deployment, etc.; and (d) the altitudes, airspeeds, thrust settings, and fuel flow used in establishing the ETOPS area of operations for each airframe-engine combination should be used in showing the corresponding terrain and obstruction clearances in accordance with Annex IV (Part-CAT).				
1.1045 Appendix 1 B 5.3 (a) AMC3 ORO.MLR.100	Performance Data for ETOPS Critical Fuel Reserve and Area of Operation including sufficient data to support the critical fuel reserve and area of operation calculation based on Approved Aeroplane Performance Data. The following data is required: (a) Detailed engine(s) inoperative performance data including fuel flow for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) drift down (includes net performance) see OPS 1.505 where applicable; (ii) cruise altitude coverage including 10 000 feet; (iii) holding; (iv) altitude capability (includes net performance); and (v) missed approach. When applicable, for aeroplanes, performance data for ETOPS critical fuel reserve and area of operation, including sufficient data to support the critical fuel reserve and area of operation calculation based on approved aircraft performance data. The following data should be included: (a) detailed engine(s)-inoperative performance data including fuel flow for standard and non-standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) drift down (includes net performance), where applicable; (ii) cruise altitude coverage including 10 000 ft; (iii) holding; (iv) altitude capability (includes net performance); and (v) missed approach;				
1.1045 Appendix 1 B 5.3 (b) AMC3 ORO.MLR.100	Performance Data for ETOPS Critical Fuel Reserve and Area of Operation including sufficient data to support the critical fuel reserve and area of operation calculation based on Approved Aeroplane Performance Data. The following data is required: Detailed all-engine-operating performance data, including nominal fuel flow data, for standard and non- standard atmospheric conditions and as a function of airspeed and power setting, where appropriate, covering: (i) cruise (altitude coverage including 10 000 feet); and (ii) holding. When applicable, for aeroplanes, performance data for ETOPS critical fuel reserve and area of operation, including sufficient data				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	to support the critical fuel reserve and area of operation calculation based on approved aircraft performance data including details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aircraft, ram air turbine (RAT) deployment, thrust-reverser deployment, etc..				
1.1045 Appendix 1 B 5.3 (c) AMC3 ORO.MLR.100	Performance Data for ETOPS Critical Fuel Reserve and Area of Operation including sufficient data to support the critical fuel reserve and area of operation calculation based on Approved Aeroplane Performance Data. The following data is required: Details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aeroplane, ram air turbine (RAT) deployment, thrust-reverser deployment, etc. The altitudes, airspeeds, thrust settings, and fuel flow used in establishing the ETOPS area of operations for each airframe-engine combination must be used in showing the corresponding terrain and obstruction clearances in accordance with this regulation. When applicable, for aeroplanes, performance data for ETOPS critical fuel reserve and area of operation, including sufficient data to support the critical fuel reserve and area of operation calculation based on approved aircraft performance data. The following data should be included: details of any other conditions relevant to ETOPS operations which can cause significant deterioration of performance, such as ice accumulation on the unprotected surfaces of the aircraft, ram air turbine (RAT) deployment, thrust-reverser deployment, etc.;				

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PART B 6	**MASS AND BALANCE**				
1.1040 (l) ORO.MLR.100(k)	An operator must ensure that the contents of the Mass and Balance are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.605 (a) CAT.POL.MAB.100 (a) - (b)	An operator shall ensure that during any phase of operation, the loading, mass and centre of gravity of the aeroplane complies with the limitations specified in the approved Aeroplane Flight Manual, or the Operations Manual if more restrictive. (a) During any phase of operation, the loading, mass and centre of gravity (CG) of the aircraft shall comply with the limitations specified in the AFM, or the operations manual if more restrictive. (b) The operator shall establish the mass and the CG of any aircraft by actual weighing prior to initial entry into service and thereafter at intervals of four years if individual aircraft masses are used, or nine years if fleet masses are used. The accumulated effects of modifications and repairs on the mass and balance shall be accounted for and properly documented. Aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known.				
1.605 (b) CAT.POL.MAB.100 (a) - (b)	An operator must establish the mass and the center of gravity of any aeroplane by actual weighing. (a) During any phase of operation, the loading, mass and centre of gravity (CG) of the aircraft shall comply with the limitations specified in the AFM, or the operations manual if more restrictive. (b) The operator shall establish the mass and the CG of any aircraft by actual weighing prior to initial entry into service and thereafter at intervals of four years if individual aircraft masses are used, or nine years if fleet masses are used. The accumulated effects of modifications and repairs on the mass and balance shall be accounted for and properly documented. Aircraft shall be reweighed if the effect of modifications on the mass and balance is not accurately known.		AP		
1.605 (c) CAT.POL.MAB.1	An operator must determine the mass of all operating items and crew members included in the aeroplane dry operating mass by				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
00 (d) - (e)	weighing or by using standard masses. The influence of their position on the aeroplane center of gravity must be determined. d) The operator shall determine the mass of all operating items and crew members included in the aircraft dry operating mass by weighing or by using standard masses. The influence of their position on the aircraft's CG shall be determined. (e) The operator shall establish the mass of the traffic load, including any ballast, by actual weighing or by determining the mass of the traffic load in accordance with standard passenger and baggage masses.				
1.605 (d) CAT.POL.MAB.100 (d) - (e)	An operator must establish the mass of the traffic load, including any ballast, by actual weighing or determine the mass of the traffic load in accordance with standard passenger and baggage masses as specified in OPS 1.620. d) The operator shall determine the mass of all operating items and crew members included in the aircraft dry operating mass by weighing or by using standard masses. The influence of their position on the aircraft's CG shall be determined. (e) The operator shall establish the mass of the traffic load, including any ballast, by actual weighing or by determining the mass of the traffic load in accordance with standard passenger and baggage masses.				
1.605 (e) CAT.POL.MAB.100 (g)	An operator must determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the Operations Manual. The operator shall determine the mass of the fuel load by using the actual density or, if not known, the density calculated in accordance with a method specified in the operations manual.				
1.605 Appendix 1 (a) AMC1 CAT.POL.MAB.100(b) (d)	Determination of the dry operating mass of an aeroplane WEIGHING OF AN AIRCRAFT (a) New aircraft that have been weighed at the factory may be placed into operation without reweighing if the mass and balance records have been adjusted for alterations or modifications to the aircraft. Aircraft transferred from one EU operator to another EU operator do not have to be weighed prior to use by the receiving operator, unless more than 4 years have elapsed since the last weighing. (b) The mass and centre of gravity (CG) position of an aircraft should be revised whenever the cumulative changes to the dry operating mass exceed ±0.5 % of the maximum landing mass or for aeroplanes the cumulative change in CG position exceeds 0.5 % of the mean aerodynamic chord. This may be done by weighing the aircraft or by calculation. (c) When weighing an aircraft, normal precautions should be taken consistent with good practices such as: (1) checking for completeness of the aircraft and equipment; (2) determining that				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	fluids are properly accounted for; (3) ensuring that the aircraft is clean; and (4) ensuring that weighing is accomplished in an enclosed building. (d) Any equipment used for weighing should be properly calibrated, zeroed, and used in accordance with the manufacturer's instructions. Each scale should be calibrated either by the manufacturer, by a civil department of weights and measures or by an appropriately authorized organisation within two years or within a time period defined by the manufacturer of the weighing equipment, whichever is less. The equipment should enable the mass of the aircraft to be established accurately. One single accuracy criterion for weighing equipment cannot be given. However, the weighing accuracy is considered satisfactory if the accuracy criteria in Table1 are met by the individual scales/cells of the weighing equipment used: Table 1: Accuracy criteria for weighing equipment For a scale/cell load An accuracy of below 2 000 kg ±1 % from 2 000 kg to 20 000 kg ±20 kg from 2 000 kg to 20 000 kg ±0·1 % DRY OPERATING MASS The dry operating mass includes: (a) crew and crew baggage; (b) catering and removable passenger service equipment; and (c) tank water and lavatory chemicals.				
1.605 Appendix 1 (b) CAT.POL.MAB.100, (f)	Special standard masses for the traffic load. In addition to standard masses for passengers and checked baggage, an operator can submit for approval to the Authority standard masses for other load items. In addition to standard masses for passengers and checked baggage, the operator can use standard masses for other load items, if it demonstrates to the competent authority that these items have the same mass or that their masses are within specified tolerances.		AP		
1.605 Appendix 1 (c) CAT.POL.MAB.100, (h) - (i)	Aeroplane loading. (h) The operator shall ensure that the loading of: (1) its aircraft is performed under the supervision of qualified personnel; and (2) traffic load is consistent with the data used for the calculation of the aircraft mass and balance. (i) The operator shall comply with additional structural limits such as the floor strength limitations, the maximum load per running metre, the maximum mass per cargo compartment and the maximum seating limit. For helicopters, in addition, the operator shall take account of in-flight changes in loading.				
1.605 Appendix 1 (d) AMC3 CAT.POL.MAB.100(b)	Centre of gravity limits. CENTRE OF GRAVITY LIMITS – OPERATIONAL CG ENVELOPE AND IN-FLIGHT CG In the Certificate Limitations section of the		AC		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	AFM, forward and aft CG limits are specified. These limits ensure that the certification stability and control criteria are met throughout the whole flight and allow the proper trim setting for take-off. The operator should ensure that these limits are respected by: (a) Defining and applying operational margins to the certified CG envelope in order to compensate for the following deviations and errors: (1) Deviations of actual CG at empty or operating mass from published values due, for example, to weighing errors, unaccounted modifications and/or equipment variations. (2) Deviations in fuel distribution in tanks from the applicable schedule. (3) Deviations in the distribution of baggage and cargo in the various compartments as compared with the assumed load distribution as well as inaccuracies in the actual mass of baggage and cargo. (4) Deviations in actual passenger seating from the seating distribution assumed when preparing the mass and balance documentation. Large CG errors may occur when 'free seating', i.e. freedom of passengers to select any seat when entering the aircraft, is permitted. Although in most cases reasonably even longitudinal passenger seating can be expected, there is a risk of an extreme forward or aft seat selection causing very large and unacceptable CG errors, assuming that the balance calculation is done on the basis of an assumed even distribution. The largest errors may occur at a load factor of approximately 50% if all passengers are seated in either the forward or aft half of the cabin. Statistical analysis indicates that the risk of such extreme seating adversely affecting the CG is greatest on small aircraft. (5) Deviations of the actual CG of cargo and passenger load within individual cargo compartments or cabin sections from the normally assumed mid position. (6) Deviations of the CG caused by gear and flap positions and by application of the prescribed fuel usage procedure, unless already covered by the certified limits. (7) Deviations caused by in-flight movement of cabin crew, galley equipment and passengers. (8) On small aeroplanes, deviations caused by the difference between actual passenger masses and standard passenger masses when such masses are used. (b) Defining and applying operational procedures in order to: (1) ensure an even distribution of passengers in the cabin; (2) take into account any significant CG travel during flight caused by passenger/crew movement; and (3) take into account any significant CG travel during flight caused by fuel consumption/transfer.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.607 Annex 1 and AMC1 CAT.POL.MAB.100(d)	Terminology. (a) Dry operating mass. The total mass of the aeroplane ready for a specific type of operation excluding all usable fuel and traffic load. This mass includes items such as: (1) crew and crew baggage; (2) catering and removable passenger service equipment; and (3) potable water and lavatory chemicals. (b) Maximum zero fuel mass. The maximum permissible mass of an aeroplane with no usable fuel. The mass of the fuel contained in particular tanks must be included in the zero fuel mass when it is explicitly mentioned in the Aeroplane Flight Manual limitations. (c) Maximum structural landing mass. The maximum permissible total aeroplane mass upon landing under normal circumstances. (d) Maximum structural take off mass. The maximum permissible total aeroplane mass at the start of the take-off run. (e) Passenger classification. (1) Adults, male and female, are defined as persons of an age of 12 years and above. (2) Children are defined as persons who are of an age of two years and above but who are less than 12 years of age. (3) Infants are defined as persons who are les than two years of age. (f) Traffic load. The total mass of passengers, baggage and cargo, including any non-revenue load. REFERE TO RULE				
1.610 CAT.POL.MAB.100, (j)	An operator shall specify, in the Operations Manual, the principles and methods involved in the loading and in the mass and balance system that meet the requirements of OPS 1.605. This system must cover all types of intended operations. The operator shall specify, in the operations manual, the principles and methods involved in the loading and in the mass and balance system that meet the requirements contained in (a) to (i). This system shall cover all types of intended operations.				
1.615 AMC2 CAT.POL.MAB.100(d)	Mass values for crew. (a) The operator should use the following mass values for crew to determine the dry operating mass: (1) actual masses including any crew baggage; or (2) standard masses, including hand baggage, of 85 kg for flight crew/technical crew members and 75 kg for cabin crew members. (b) The operator should correct the dry operating mass to account for any additional baggage. The position of this additional baggage should be accounted for when establishing the centre of gravity of the aeroplane.				
1.615 (a)(3) AMC2 CAT.POL.MAB.100(d)	An operator shall use the following mass values to determine the dry operating mass: other standard masses acceptable to the Authority MASS VALUES FOR CREW MEMBERS (a) The operator should use the following mass values for crew to determine the dry		AC		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	operating mass: (1) actual masses including any crew baggage; or (2) standard masses, including hand baggage, of 85 kg for flight crew/technical crew members and 75 kg for cabin crew members. (b) The operator should correct the dry operating mass to account for any additional baggage. The position of this additional baggage should be accounted for when establishing the centre of gravity of the aeroplane.				
1.620 AMC1 CAT.POL.MAB.100 and AMC2 CAT.POL.MAB.100 and GM1 CAT.POL.MAB.100 and GM2 CAT.POL.MAB.100 and AMC1 CAT.POL.MAB.100 and AMC1 CAT.POL.MAB.105	REFERE TO RULE REFERE TO RULE				
1.620 (g) GM2 CAT.POL.MAB.100(e)	If an operator wishes to use standard mass values other than those contained in Tables 1 to 3 above, he must advise the Authority of his reasons and gain its approval in advance. He must also submit for approval a detailed weighing survey plan and apply the statistical analysis method given in Appendix 1 to OPS 1.620 (g). After verification and approval by the Authority of the results of the weighing survey, the revised standard mass values are only applicable to that opera- tor. The revised standard mass values can only be used in circumstances consistent with those under which the survey was conducted. Where revised standard masses exceed those in Tables 1 to 3, then such higher values must be used. REFERE TO RULE		AP		
1.620 (g) Appendix 1 GM3 CAT.POL.MAB.100(e)	Procedure for establishing revised standard mass values for passengers and baggage. REFERE TO RULE		AP		
1.620 (g) Appendix 1 (c)(4) GM3 CAT.POL.MAB.100(e)	Operators have the option to submit a detailed survey plan to the Authority for approval and subsequently a deviation from the revised standard mass value provided this deviating value is determined by use of the procedure explained in this Appendix. Such deviations must be reviewed at intervals not exceeding five		AP		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	years. REFERE TO RULE				
1.620 (g) Appendix 1 (c)(5) AMC2 CAT.POL.MAB.100(e)	All adult revised standard mass values must be based on a male/female ratio of 80/20 in respect of all flights except holiday charters which are 50/50. If an operator wishes to obtain approval for use of a different ratio on specific routes or flights then data must be submitted to the Authority showing that the alternative male/female ratio is conservative and covers at least 84 % of the actual male/female ratios on a sample of at least 100 representative flights. All adult revised standard mass values should be based on a male/female ratio of 80/20 in respect of all flights except holiday charters that are 50/50. A different ratio on specific routes or flights may be used, provided supporting data shows that the alternative male/female ratio is conservative and covers at least 84 % of the actual male/female ratios on a sample of at least 100 representative flights.		AP		
1.625 (a) CAT.POL.MAB.105, (a)	An operator shall establish mass and balance documentation prior to each flight specifying the load and its distribution. The mass and balance documentation must enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aeroplane are not exceeded. The person preparing the mass and balance documentation must be named on the document. The person supervising the loading of the aeroplane must confirm by signature that the load and its distribution are in accordance with the mass and balance documentation. This document must be acceptable to the commander, his/her acceptance being indicated by countersignature or equivalent. (See also OPS 1.1055 (a)12). (a) The operator shall establish mass and balance data and produce mass and balance documentation prior to each flight specifying the load and its distribution. The mass and balance documentation shall enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aircraft are not exceeded. The mass and balance documentation shall contain the following information: (1) Aircraft registration and type; (2) Flight identification, number and date; (3) Name of the commander; (4) Name of the person who prepared the document; (5) Dry operating mass and the corresponding CG of the aircraft: (i) for performance class B aeroplanes and for helicopters the CG position may not need to be on the mass and balance documentation if, for example, the load distribution is in				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	accordance with a pre-calculated balance table or if it can be shown that for the planned operations a correct balance can be ensured, whatever the real load is; (6) Mass of the fuel at take-off and the mass of trip fuel; (7) Mass of consumables other than fuel, if applicable; (8) Load components including passengers, baggage, freight and ballast; (9) Take-off mass, landing mass and zero fuel mass; (10) Applicable aircraft CG positions; and (11) The limiting mass and CG values. The information above shall be available in flight planning documents or mass and balance systems. Some of this information may be contained in other documents readily available for use.				
1.625 Appendix 1 (a)(1) CAT.POL.MAB.105, (a)	(a) Mass and balance documentation (1) Contents (i) The mass and balance documentation must contain the following information: (A) the aeroplane registration and type; (B) the flight identification number and date; (C) the identity of the commander; (D) the identity of the person who prepared the document; (E) the dry operating mass and the corresponding CG of the aeroplane; (F) the mass of the fuel at take-off and the mass of trip fuel; (G) the mass of consumables other than fuel; (H) the components of the load including passengers, baggage, freight and ballast; (I) the take-off mass, landing mass and zero fuel mass; (J) the load distribution; (K) the applicable aeroplane CG positions; and (L) the limiting mass and CG values. (ii) Subject to the approval of the Authority, an operator may omit some of this Data from the mass and balance documentation. (a) The operator shall establish mass and balance data and produce mass and balance documentation prior to each flight specifying the load and its distribution. The mass and balance documentation shall enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aircraft are not exceeded. The mass and balance documentation shall contain the following information: (1) Aircraft registration and type; (2) Flight identification, number and date; (3) Name of the commander; (4) Name of the person who prepared the document; (5) Dry operating mass and the corresponding CG of the aircraft: (i) for performance class B aeroplanes and for helicopters the CG position may not need to be on the mass and balance documentation if, for example, the load distribution is in accordance with a pre-calculated balance table or if it can be shown that for the planned operations a correct balance can be ensured, whatever the real load is; (6) Mass of the fuel at take-off and the mass of trip fuel; (7) Mass of consumables other than fuel,				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	if applicable; (8) Load components including passengers, baggage, freight and ballast; (9) Take-off mass, landing mass and zero fuel mass; (10) Applicable aircraft CG positions; and (11) The limiting mass and CG values. The information above shall be available in flight planning documents or mass and balance systems. Some of this information may be contained in other documents readily available for use.				
1.625 Appendix 1 (a)(1)(ii) CAT.POL.MAB.105, (a)	(a) Mass and balance documentation (1) Contents Subject to the approval of the Authority, an operator may omit some of this Data from the mass and balance documentation. (a) The operator shall establish mass and balance data and produce mass and balance documentation prior to each flight specifying the load and its distribution. The mass and balance documentation shall enable the commander to determine that the load and its distribution is such that the mass and balance limits of the aircraft are not exceeded. The mass and balance documentation shall contain the following information: (1) Aircraft registration and type; (2) Flight identification, number and date; (3) Name of the commander; (4) Name of the person who prepared the document; (5) Dry operating mass and the corresponding CG of the aircraft: (i) for performance class B aeroplanes and for helicopters the CG position may not need to be on the mass and balance documentation if, for example, the load distribution is in accordance with a pre-calculated balance table or if it can be shown that for the planned operations a correct balance can be ensured, whatever the real load is; (6) Mass of the fuel at take-off and the mass of trip fuel; (7) Mass of consumables other than fuel, if applicable; (8) Load components including passengers, baggage, freight and ballast; (9) Take-off mass, landing mass and zero fuel mass; (10) Applicable aircraft CG positions; and (11) The limiting mass and CG values. The information above shall be available in flight planning documents or mass and balance systems. Some of this information may be contained in other documents readily available for use.		AP		
1.625 (b) CAT.POL.MAB.105, (d)	An operator must specify procedures for last minute changes to the load. The operator shall specify procedures for last minute changes to the load to ensure that: (1) any last minute change after the completion of the mass and balance documentation is brought to the attention of the commander and entered in the flight planning documents containing the mass and balance documentation; (2) the maximum last minute change allowed in passenger numbers or				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	hold load is specified; and (3) new mass and balance documentation is prepared if this maximum number is exceeded				
1.625 (c)	Subject to the approval of the Authority, an operator may use an alternative to the procedures required by paragraphs (a) and (b) above.		AP		
1.625 Appendix 1 (a)(2) CAT.POL.MAB.105, (d)	Mass and balance documentation. Last minute change. If any last minute change occurs after the completion of the mass and balance documentation, this must be brought to the attention of the commander and the last minute change must be entered on the mass and balance documentation. The maximum allowed change in the number of passengers or hold load acceptable as a last minute change must be specified in the Operations Manual. If this number is exceeded, new mass and balance documentation must be prepared. The operator shall specify procedures for last minute changes to the load to ensure that: (1) any last minute change after the completion of the mass and balance documentation is brought to the attention of the commander and entered in the flight planning documents containing the mass and balance documentation; (2) the maximum last minute change allowed in passenger numbers or hold load is specified; and (3) new mass and balance documentation is prepared if this maximum number is exceeded		AC		
1.625 Appendix 1 (b) CAT.POL.MAB.105, (b)	Where mass and balance documentation is generated by a computerized mass and balance system, the operator must verify the integrity of the output data. He must establish a system to check that amendments of his input data are incorporated properly in the system and that the system is operating correctly on a continuous basis by verifying the output data at intervals not exceeding 6 months. Where mass and balance data and documentation is generated by a computerised mass and balance system, the operator shall verify the integrity of the output data.				
1.625 Appendix 1 (c) and (d) CAT.POL.MAB.105, (e) and AMC2 CAT.POL.MAB.105(c)	An operator must obtain the approval of the Authority if he wishes to use an onboard mass and balance computer system as a primary source for dispatch. When mass and balance documentation is sent to aeroplanes via datalink, a copy of the final mass and balance documentation as accepted by the commander must be available on the ground. The operator shall obtain approval by the competent authority if he/she wishes to use an onboard integrated mass and balance computer system or a stand-alone computerised mass and balance		AP		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	system as a primary source for dispatch. The operator shall demonstrate the accuracy and reliability of that system. Whenever the mass and balance documentation is sent to the aircraft via data link, a copy of the final mass and balance documentation as accepted by the commander should be available on the ground.				
1.1045 Appendix 1 B 6 (b) AMC3 ORO.MLR.100	Instructions and data for the calculation of the mass and balance including: Information and instructions for completion of mass and balance documentation, including manual and computer generated types. Instructions and data for the calculation of the mass and balance including information and instructions for completion of mass and balance documentation, including manual and computer generated types.				
1.1045 Appendix 1 B 6 (a) AMC3 ORO.MLR.100	Instructions and data for the calculation of the mass and balance including: Calculation system (e.g. Index system); Instructions and data for the calculation of the mass and balance including calculation system (e.g. index system).				
1.1045 Appendix 1 B 6 (c) AMC3 ORO.MLR.100	Limiting masses and center of gravity for the types, variants or individual aeroplanes used by the operator Instructions and data for the calculation of the mass and balance including limiting masses and centre of gravity for the types, variants or individual aircraft used by the operator.				
1.1045 Appendix 1 B 6 (d) AMC3 ORO.MLR.100	Instructions and data for the calculation of the mass and balance including: dry operating mass and corresponding centre of gravity or index. Instructions and data for the calculation of the mass and balance including dry operating mass and corresponding centre of gravity or index.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 7	**LOADING**				
1.1040 (l) ORO.MLR.100(k)	An operator must ensure that the contents of the Loading are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.290 (b)(10) CAT.OP.MPA.175	The commander shall not commence a flight unless he/she is satisfied that the load is properly distributed and safely secured; (a) An operational flight plan shall be completed for each intended flight based on considerations of aircraft performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes/ operating sites concerned. (b) The flight shall not be commenced unless the commander is satisfied that: (1) all items stipulated in 2.a.3 of Annex IV to Regulation (EC) No 216/2008 concerning the airworthiness and registration of the aircraft, instrument and equipment, mass and centre of gravity (CG) location, baggage and cargo and aircraft operating limitations can be complied with; (2) the aircraft is not operated contrary to the provisions of the configuration deviation list (CDL); (3) the parts of the operations manual that are required for the conduct of the flight are available; (4) the documents, additional information and forms required to be available by CAT.GEN.MPA.180 are on board; (5) current maps, charts and associated documentation or equivalent data are available to cover the intended operation of the aircraft including any diversion that may reasonably be expected; (6) ground facilities and services required for the planned flight are available and adequate; (7) the provisions specified in the operations manual in respect of fuel, oil, oxygen, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes, where required, can be complied with for the planned flight; and (8) any additional operational limitation can be complied with. (c) Notwithstanding (a), an operational flight plan is not required for operations under VFR of: (1) other-than-complex motor-powered aeroplane taking off and landing at the same aerodrome or operating site; or (2) helicopters with an MCTOM of 3 175 kg or less, by day and over routes				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	navigated by reference to visual landmarks in a local area as specified in the operations manual.				
1.1045 Appendix 1 B 7 AMC3 ORO.MLR.100	Procedures and provisions for loading and securing the load in the aeroplane. Procedures and provisions for loading and unloading and securing the load in the aircraft.				
1.270 (a) CAT.OP.MPA.160	An operator shall establish procedures to ensure that only such hand baggage is taken into the passenger cabin as can be adequately and securely stowed. The operator shall establish procedures to ensure that: (a) only hand baggage that can be adequately and securely stowed is taken into the passenger compartment; and (b) all baggage and cargo on board that might cause injury or damage, or obstruct aisles and exits if displaced, is stowed so as to prevent movement.				
1.270 (b) and 1.270 Appendix 1 CAT.OP.MPA.160 and AMC2 CAT.OP.MPA.160	An operator shall establish procedures to ensure that all baggage and cargo on board, which might cause injury or dam- age, or obstruct aisles and exits if displaced, is placed in stowages designed to prevent movement. Procedures established by an operator to ensure that hand baggage and cargo is adequately and securely stowed must take account of the following: 1 each item carried in a cabin must be stowed only in a location that is capable of restraining it; 2 mass limitations placarded on or adjacent to stowages must not be exceeded; 3 underseat stowages must not be used unless the seat is equipped with a restraint bar and the baggage is of such size that it may adequately be restrained by this equipment; 4 items must not be stowed in toilets or against bulkheads that are incapable of restraining articles against movement forwards, sideways or upwards and unless the bulkheads carry a placard specifying the greatest mass that may be placed there; 5 baggage and cargo placed in lockers must not be of such size that they prevent latched doors from being closed securely; 6 baggage and cargo must not be placed where it can impede access to emergency equipment; and 7 checks must be made before take-off, before landing, and whenever the fasten seat belts signs are illuminated or it is otherwise so ordered to ensure that baggage is stowed where it cannot impede evacuation from the aircraft or cause injury by falling (or other movement) as may be appropriate to the phase of flight. The operator shall establish procedures to ensure that: (a) only hand baggage that can be adequately and securely stowed is taken into the passenger compartment; and (b) all baggage and cargo on board that might cause injury or damage, or obstruct				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	aisles and exits if displaced, is stowed so as to prevent movement. The following should be observed before carrying cargo in the passenger compartment: (a) for aeroplanes: (1) dangerous goods should not be allowed; an (2) a mix of passengers and live animals should only be allowed for pets weighing not more than 8 kg and guide dogs; (b) for aeroplanes and helicopters: (1) the mass of cargo should not exceed the structural loading limits of the floor or seats; (2) the number/type of restraint devices and their attachment points should be capable of restraining the cargo in accordance with applicable certification specifications; and (3) the location of the cargo should be such that, in the event of an emergency evacuation, it will not hinder egress nor impair the crew's view.				
1.1210 (a)	An operator shall ensure that dangerous goods are not carried in an aeroplane cabin occupied by passengers or on the flight deck, except as specified in the ICAO Technical Instructions (ICAO-Doc 9284-AN/905).				
1.1210 (b) 1.1210 (c)	An operator shall ensure that dangerous goods are loaded, segregated, stowed and secured on an aeroplane in cargo compartments as specified in the ICAO Technical Instructions (ICAO- Doc 9284-AN/905). Dangerous Goods Designated for Carriage Only on Cargo Aircraft. An operator shall ensure that packages of dangerous goods bearing the Cargo Aircraft Only label are carried on a cargo aircraft and loaded as specified in the ICAO Technical Instructions (ICAO- Doc 9284-AN/905).				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 8	**CONFIGURATION DEVIATION LIST**				
1.1045 Appendix 1 B 8. AMC3 ORO.MLR.100	The configuration deviation list(s) (CDL), if provided by the manufacturer, taking account of the aeroplane types and variants operated including procedures to be followed when an aeroplane is being despatched under the terms of its CDL. The CDL(s), if provided by the manufacturer, taking account of the aircraft types and variants operated including procedures to be followed when an aircraft is being dispatched under the terms of its CDL.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 9	**MINIMUM EQUIPMENT LIST (MEL)**				
1.1045 Appendix 1 B 9. AMC3 ORO.MLR.100	The minimum equipment list (MEL) taking account of the aeroplane types and variants operated and the type(s)/area(s) of operation. The MEL must include the navigational equipment and take into account the required performance for the route and area of operation. The MEL for each aircraft type or variant operated and the type(s)/area(s) of operation. The MEL should also include the dispatch conditions associated with operations required for a specific approval (e.g. RNAV, RNP, RVSM, ETOPS). Consideration should be given to using the ATA number system when allocating chapters and numbers.				
1.030 (a) ORO.MLR.105(a), (b)	An operator shall establish, for each aeroplane, a minimum equipment list (MEL) approved by the Authority. This shall be based upon, but no less restrictive than, the relevant master minimum equipment list (MMEL) (if this exists) accepted by the Authority. (a) A minimum equipment list (MEL) shall be established as specified under 8.a.3 of Annex IV to Regulation (EC) No 216/2008, based on the relevant master minimum equipment list (MMEL) as defined in the data established in accordance with Regulation (EC) No 1702/2003. (b) The MEL and any amendment thereto shall be approved by the competent authority.		AP		
1.030 (b) CAT.IDE.A.105, (b)	An operator shall not operate an aeroplane other than in accordance with the MEL unless permitted by the Authority. Any such permission will in no circumstances permit operation outside the constraints of the MMEL. A flight shall not be commenced when any of the aeroplane's instruments, items of equipment or functions required for the intended flight are inoperative or missing, unless: the operator is approved by the competent authority to operate the aeroplane within the constraints of the master minimum equipment list (MMEL).		AP		

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 10	**SURVIVAL AND EMERGENCY EQUIPMENT INCLUDING OXYGEN**				
1.1040 (l) ORO.MLR.100(k)	An operator must ensure that the contents of the Survival and Emergency Equipment are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.1045 Appendix 1 B 10.1 AMC3 ORO.MLR.100	A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated check list(s) must also be included. A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated checklist(s) should also be included.				
1.1045 Appendix 1 B 10.1 and 1.330 AMC3 ORO.MLR.100 and CAT.GEN.MPA.105, (a)(13)	A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated check list(s) must also be included. The commander shall ensure that relevant emergency equipment remains easily accessible for immediate use. A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated checklist(s) should also be included. The commander, in addition to complying with CAT.GEN.MPA.100, shall be satisfied that relevant emergency equipment remains easily accessible for immediate use.				
1.055 CAT.GEN.MPA.145	An operator shall ensure that there are available for immediate communication to rescue coordination centres, lists containing information on the emergency and survival equipment carried on board all of his aeroplanes. The information shall include, as applicable, the number, colour and type of life-rafts and				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of emergency portable radio equipment. The operator shall at all times have available for immediate communication to rescue coordination centres (RCCs) lists containing information on the emergency and survival equipment carried on board any of their aircraft.				
1.745 (a) CAT.IDE.A.220, (a), (b)(1)	(a) An operator shall not operate an aeroplane unless it is equipped with first-aid kits, readily accessible for use, to the following scale: Number of passenger seats installed - Number of First-Aid Kits required 0 to 99 - 1 100 to 199 - 2 200 to 299 - 3 300 and more - 4 (a) Aeroplanes shall be equipped with first-aid kits, in accordance with Table 1. Table 1 Number of first-aid kits required Number of passenger seats installed - Number of first-aid kits required 0-100 ...1 101-200 ...2 201-300...3 301-400...4 401-500...5 501 or more...6 (b) First-aid kits shall be: (1) readily accessible for use				
1.755 CAT.IDE.A.225	(a) An operator shall not operate an aeroplane with a maximum approved passenger seating configuration of more than 30 seats unless it is equipped with an emergency medical kit if any point on the planned route is more than 60 minutes flying time (at normal cruising speed) from an aerodrome at which qualified medical assistance could be expected to be available. (b) The commander shall ensure that drugs are not administered except by qualified doctors, nurses or similarly qualified personnel. (c) Conditions for carriage 1. The emergency medical kit must be dust and moisture proof and shall be carried under security conditions, where practicable, on the flight deck; and 2. An operator shall ensure that emergency medical kits are: (i) inspected periodically to confirm, to the extent possible, that the contents are maintained in the condition necessary for their intended use; and (ii) replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances warrant. (a) Aeroplanes with an MOPSC of more than 30 shall be equipped with an emergency medical kit when any point on the planned route is more than 60 minutes flying time at normal cruising speed from an aerodrome at which qualified medical assistance could be expected to be available. (b) The commander shall ensure that drugs are only administered by appropriately qualified persons. (c) The emergency medical kit referred to in (a) shall be: (1) dust and moisture proof; (2) carried in a way that prevents unauthorised access; and (3) kept up to date.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
1.790 AMC1 CAT.IDE.A.250	An operator shall not operate an aeroplane unless hand fire extinguishers are provided for use in crew, passenger and, as applicable, cargo compartments and galleys in accordance with the following: (a) The type and quantity of extinguishing agent must be suitable for the kinds of fires likely to occur in the compartment where the extinguisher is intended to be used and, for personnel compartments, must minimise the hazard of toxic gas concentration; (b) At least one hand fire extinguisher, containing Halon 1211 (bromochlorodifluoro-methane, CBrCIF2), or equivalent as the extinguishing agent, must be conveniently located on the flight deck for use by the flight crew; (c) At least one hand fire extinguisher must be located in, or readily accessible for use in, each galley not located on the main passenger deck; (d) At least one readily accessible hand fire extinguisher must be available for use in each Class A or Class B cargo or baggage compartment and in each Class E cargo compartment that is accessible to crew members in flight; and (e) At least the following number of hand fire extinguishers must be conveniently located in the passenger compartment(s): Maximum approved passenger seating configuration - Number of Extinguishers 7 to 30 - 1 31 to 60 - 2 61 to 200 - 3 201 to 300 - 4 301 to 400 - 5 401 to 500 - 6 501 to 600 - 7 601 or more - 8 When two or more extinguishers are required, they must be evenly distributed in the passenger compartment. (f) At least one of the required fire extinguishers located in the passenger compartment of an aeroplane with a maximum approved passenger seating configuration of at least 31, and not more than 60, and at least two of the fire extinguishers located in the passenger compartment of an aeroplane with a maximum approved passenger seating configuration of 61 or more must contain Halon 1211 (bromochlorodifluoromethane, CBrCIF2), or equivalent as the extinguishing agent. (a) The number and location of hand fire extinguishers should be such as to provide adequate availability for use, account being taken of the number and size of the passenger compartments, the need to minimise the hazard of toxic gas concentrations and the location of lavatories, galleys, etc. These considerations may result in a number of fire extinguishers greater than the minimum required. (b) There should be at least one hand fire extinguisher installed in the flight crew compartment and this should be suitable for fighting both flammable fluid and electrical equipment fires. Additional hand fire extinguishers may be required for the protection of other compartments accessible to the crew in flight.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	Dry chemical fire extinguishers should not be used in the flight crew compartment, or in any compartment not separated by a partition from the flight crew compartment, because of the adverse effect on vision during discharge and, if conductive, interference with electrical contacts by the chemical residues. (c) Where only one hand fire extinguisher is required in the passenger compartments it should be located near the cabin crew member's station, where provided. (d) Where two or more hand fire extinguishers are required in the passenger compartments and their location is not otherwise dictated by consideration of CAT.IDE.A.250 (b), an extinguisher should be located near each end of the cabin with the remainder distributed throughout the cabin as evenly as is practicable.(e) Unless an extinguisher is clearly visible, its location should be indicated by a placard or sign. Appropriate symbols may also be used to supplement such a placard or sign.				
1.795 CAT.IDE.A.255	Crash axes and crowbars. (a) Aeroplanes with an MCTOM of more than 5 700 kg or with an MOPSC of more than nine shall be equipped with at least one crash axe or crowbar located in the flight crew compartment. (b) In the case of aeroplanes with an MOPSC of more than 200, an additional crash axe or crowbar shall be installed in or near the rearmost galley area. (c) Crash axes and crowbars located in the passenger compartment shall not be visible to passengers.				
1.810 CAT.IDE.A.270	(a) An operator shall not operate an aeroplane with a maximum approved passenger seating configuration of more than 60 and carrying one or more passengers unless it is equipped with portable battery-powered megaphones readily accessible for use by crew members during an emergency evacuation, to the following scales: 1. For each passenger deck: Passenger seating configuration - Number of Megaphones Required 61 to 99 - 1 100 or more - 2 2. For aeroplanes with more than one passenger deck, in all cases when the total passenger seating configuration is more than 60, at least one megaphone is required. Aeroplanes with an MOPSC of more than 60 and carrying at least one passenger shall be equipped with the following quantities of portable battery-powered megaphones readily accessible for use by crew members during an emergency evacuation: (a) For each passenger deck: Table 1 Number of megaphones Passenger seating configuration - Number of megaphones 61 to 99.....1 100 or more..... 2 (b) For aeroplanes with more than one passenger deck, in all cases when the total passenger seating configuration is more than 60, at least one megaphone.				

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1.815 CAT.IDE.A.275	(a) An operator shall not operate a passenger carrying aeroplane which has a maximum approved passenger seating con- figuration of more than nine unless it is provided with an emergency lighting system having an independent power supply to facilitate the evacuation of the aeroplane. The emergency lighting system must include: 1. For aeroplanes which have a maximum approved passenger seating configuration of more than 19: (i) Sources of general cabin illumination; (ii) Internal lighting in floor level emergency exit areas; and (iii) Illuminated emergency exit marking and locating signs. (iv) For aeroplanes for which the application for the type certificate or equivalent was filed before 1 May 1972, and when flying by night, exterior emergency lighting at all over wing exits, and at exits where descent assist means are required. (v) For aeroplanes for which the application for the type certificate or equivalent was filed on or after 1 May 1972, and when flying by night, exterior emergency lighting at all passenger emergency exits. (vi) For aeroplanes for which the type certificate was first issued on or after 1 January 1958, floor proximity emergency escape path marking system in the passenger compartment(s). 2. For aeroplanes which have a maximum approved passenger seating configuration of 19 or less and are certificated to the Certification Specifications in CS-25 or CS-23: (i) Sources of general cabin illumination; (ii) Internal lighting in emergency exit areas; and (iii) Illuminated emergency exit marking and locating signs. Emergency lighting and marking. (a) Aeroplanes with an MOPSC of more than nine shall be equipped with an emergency lighting system having an independent power supply to facilitate the evacuation of the aeroplane. (b) In the case of aeroplanes with an MOPSC of more than 19, the emergency lighting system, referred to in (a) shall include: (1) sources of general cabin illumination;(2) internal lighting in floor level emergency exit areas; (3) illuminated emergency exit marking and locating signs; (4) in the case of aeroplanes for which the application for the type certificate or equivalent was filed before 1 May 1972, when operated by night, exterior emergency lighting at all overwing exits and at exits where descent assist means are required; (5) in the case of aeroplanes for which the application for the type certificate or equivalent was filed after 30 April 1972, when operated by night, exterior emergency lighting at all passenger emergency exits; and (6) in the case of aeroplanes for which the type certificate was first issued on or after 31 December 1957, floor proximity emergency escape path				

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	marking system(s) in the passenger compartments. (c) In the case of aeroplanes with an MOPSC of 19 or less and type certified on the basis of the Agency's airworthiness codes, the emergency lighting system, referred to in (a) shall include the equipment referred to in (b)(1) to (3). (d) In the case of aeroplanes with an MOPSC of 19 or less that are not certified on the basis of the Agency's airworthiness codes, the emergency lighting system, referred to in (a) shall include the equipment referred to in (b)(1). (e) Aeroplanes with an MOPSC of nine or less, operated at night, shall be equipped with a source of general cabin illumination to facilitate the evacuation of the aeroplane.				
1.820 CAT.IDE.A.280	(a) An operator shall not operate an aeroplane authorised to carry more than 19 passengers unless it is equipped with at least: 1. one automatic emergency locator transmitter (ELT) or two ELTs of any type; or 2. two ELTs, one of which shall be automatic for aeroplanes first issued with an individual certificate of airworthiness after 1 July 2008. (b) An operator shall not operate an aeroplane authorised to carry 19 passengers or less unless it is equipped with at least: 1. one ELT of any type; or 2. one automatic ELT for aeroplanes first issued with an individual certificate of airworthiness after 1 July 2008. (c) An operator shall ensure that all ELTs carried to satisfy the above requirements operate in accordance with the relevant provisions of ICAO Annex 10, Volume III. (a) Aeroplanes with an MOPSC of more than 19 shall be equipped with at least: (1) two ELTs, one of which shall be automatic, in the case of aeroplanes first issued with an individual CofA after 1 July 2008; or (2) one automatic ELT or two ELTs of any type, in the case of aeroplanes first issued with an individual CofA on or before 1 July 2008. (b) Aeroplanes with an MOPSC of 19 or less shall be equipped with at least: (1) one automatic ELT, in the case of aeroplanes first issued with an individual CofA after 1 July 2008; or (2) one ELT of any type, in the case of aeroplanes first issued with an individual CofA on or before 1 July 2008. (c) An ELT of any type shall be capable of transmitting simultaneously on 121,5 MHz and 406 MHz.				
1.825 CAT.IDE.A.285, (a)	(a) Land aeroplanes. An operator shall not operate a land aeroplane: 1. when flying over water and at a distance of more than 50 nautical miles from the shore; or 2. 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 a mishap there would be a likelihood of a ditching, unless it is equipped with life jackets equipped with a survivor locator light, for each person on board. Each life jacket				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	must be stowed in a position easily accessible from the seat or berth of the person for whose use it is provided. Life jackets for infants may be substituted by other approved flotation devices equipped with a survivor locator light. (b) Seaplanes and amphibians. An operator shall not operate a seaplane or an amphibian on water unless it is equipped with life jackets equipped with a survivor locator light, for each person on board. Each life jacket must be stowed in a position easily accessible from the seat or berth of the person for whose use it is provided. Life jackets for infants may be substituted by other approved flotation devices equipped with a survivor locator light. (a) The following aeroplanes shall be equipped with a life-jacket for each person on board or equivalent flotation device for each person on board younger than 24 months, stowed in a position that is readily accessible from the seat or berth of the person for whose use it is provided: (1) landplanes operated over water at a distance of more than 50 NM from the shore or taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that there would be a likelihood of a ditching; and (2) seaplanes operated over water.				
1.830 CAT.IDE.A.285 and AMC2 CAT.IDE.A.280, (c) and AMC1 CAT.IDE.A.285	(a) On overwater flights, an operator shall not operate an aeroplane at a distance away from land, which is suitable for making an emergency landing, greater than that corresponding to: 1. 120 minutes at cruising speed or 400 nautical miles, whichever is the lesser, for aeroplanes capable of continuing the flight to an aerodrome with the critical power unit(s) becoming inoperative at any point along the route or planned diversions; or 2. 30 minutes at cruising speed or 100 nautical miles, whichever is the lesser, for all other aeroplanes, unless the equipment specified in subparagraphs (b) and (c) below is carried. (b) Sufficient life-rafts to carry all persons on board. Unless excess rafts of enough capacity are provided, the buoyancy and seating capacity beyond the rated capacity of the rafts must accommodate all occupants of the aeroplane in the event of a loss of one raft of the largest rated capacity. The life-rafts shall be equipped with: 1. a survivor locator light; and 2. life saving equipment including means of sustaining life as appropriate to the flight to be undertaken; and (c) At least two survival emergency locator transmitters (ELT (S)) capable of transmitting on the distress frequencies pre- scribed in ICAO Annex 10, Volume V, Chapter 2. (a) The following aeroplanes shall be equipped with a life-jacket for each person on board or equivalent flotation device for each				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	person on board younger than 24 months, stowed in a position that is readily accessible from the seat or berth of the person for whose use it is provided: (1) landplanes operated over water at a distance of more than 50 NM from the shore or taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that there would be a likelihood of a ditching; and (2) seaplanes operated over water. (b) Each life-jacket or equivalent individual flotation device shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons. (c) Seaplanes operated over water shall be equipped with: (1) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the seaplane on water, appropriate to its size, weight and handling characteristics; and (2) equipment for making the sound signals as prescribed in the International Regulations for Preventing Collisions at Sea, where applicable. (d) Aeroplanes operated over water at a distance away from land suitable for making an emergency landing, greater than that corresponding to: (1) 120 minutes at cruising speed or 400 NM, whichever is the lesser, in the case of aeroplanes capable of continuing the flight to an aerodrome with the critical engine(s) becoming inoperative at any point along the route or planned diversions; or (2) for all other aeroplanes, 30 minutes at cruising speed or 100 NM, whichever is the lesser, shall be equipped with the equipment specified in (e). (e) Aeroplanes complying with (d) shall carry the following equipment: (1) life-rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in an emergency, and being of sufficient size to accommodate all the survivors in the event of a loss of one raft of the largest rated capacity; (2) a survivor locator light in each life-raft; (3) life-saving equipment to provide the means for sustaining life, as appropriate for the flight to be undertaken; and (4) at least two survival ELTs (ELT(S)). Any ELT carried should operate in accordance with the relevant provisions of ICAO Annex 10, Volume III communications systems and should be registered with the national agency responsible for initiating search and rescue or other nominated agency. a) The following should be readily available with each life-raft: (1) means for maintaining buoyancy; (2) a sea anchor: (3) life-lines and means of attaching one life-raft to another; (4) paddles for life-rafts with a capacity of six or less; (5) means of protecting the occupants from the elements; (6) a water-resistant torch; (7) signalling equipment to make the pyrotechnic distress signals described in ICAO Annex 2, Rules of the Air; (8)				

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	100 g of glucose tablets for each four, or fraction of four, persons that the life-raft is designed to carry:(9) at least 2 litres of drinkable water provided in durable containers or means of making sea water drinkable or a combination of both; and (10) first-aid equipment. (b) As far as practicable, items listed in (a) should be contained in a pack.				
1.835 GM2 CAT.IDE.A.305	An operator shall not operate an aeroplane across areas in which search and rescue would be especially difficult unless it is equipped with the following: (a) signalling equipment to make the pyrotechnical distress signals described in ICAO Annex 2; (b) at least one ELT (S) is capable of transmitting on the distress frequencies prescribed in ICAO Annex 10, Volume V, Chapter 2; and (c) additional survival equipment for the route to be flown taking account of the number of persons on board except that the equipment specified in subparagraph (c) need not be carried when the aeroplane either: 1. remains within a distance from an area where search and rescue is not especially difficult corresponding to: (i) 120 minutes at the one engine inoperative cruising speed for aeroplanes capable of continuing the flight to an aerodrome with the critical power unit(s) becoming inoperative at any point along the route or planned diversions; or (ii) 30 minutes at cruising speed for all other aeroplanes, or, 2. for aeroplanes certificated to the Certification Specifications in CS-25 or equivalent, no greater distance than that corresponding to 90 minutes at cruising speed from an area suitable for making an emergency landing. AREAS IN WHICH SEARCH AND RESCUE WOULD BE ESPECIALLY DIFFICULT The expression ‘areas in which search and rescue would be especially difficult’ should be interpreted, in this context, as meaning: (a) areas so designated by the authority responsible for managing search and rescue; or (b) areas that are largely uninhabited and where: (1) the authority referred to in (a) has not published any information to confirm whether search and rescue would be or would not be especially difficult; and (2) the authority referred to in (a) does not, as a matter of policy, designate areas as being especially difficult for search and rescue.				
1.840 CAT.IDE.A.285, (c)	(a) An operator shall not operate a seaplane or an amphibian on water unless it is equipped with: 1. a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the aircraft on water, appropriate to its size, weight and handling characteristics; and 2. equipment for making the sound signals prescribed in the International Regulations for preventing collisions at sea, where applicable.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	Seaplanes operated over water shall be equipped with: (1) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring the seaplane on water, appropriate to its size, weight and handling characteristics; and (2) equipment for making the sound signals as prescribed in the International Regulations for Preventing Collisions at Sea, where applicable				
1.315 CAT.OP.MPA.220	Assisting means for emergency evacuation. An operator shall establish procedures to ensure that before taxiing, take-off and landing, and when safe and practicable to do so, an assisting means for emergency evacuation that deploys automatically, is armed. The operator shall establish procedures to ensure that before taxiing, take-off and landing and when safe and practicable to do so, all means of assistance for emergency evacuation that deploy automatically are armed.				
1.1045 Appendix 1 B 10.2 AMC3 ORO.MLR.100	The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression must be considered. The information provided must be in a form in which it can be used without difficulty. The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression should be considered.				
1.1045 Appendix 1 B 10.2 AMC3 ORO.MLR.100	The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression must be considered. The information provided must be in a form in which it can be used without difficulty. The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression should be considered.				
1.760 GM1 CAT.IDE.A.230, (a) - (e)	(a) An operator shall not operate a pressurised aeroplane at altitudes above 25 000 ft, when a cabin crew member is required to be carried, unless it is equipped with a supply of undiluted oxygen for passengers who, for physiological reasons, might require oxygen following a cabin depressurisation. The amount of oxygen shall be calculated using an average flow rate of at least three litres standard temperature pressure dry (STPD)/minute/ person and shall be sufficient for the remainder of the flight after cabin				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	depressurisation when the cabin altitude exceeds 8 000 ft but does not exceed 15 000 ft, for at least 2 % of the passengers carried, but in no case for less than one person. There shall be a sufficient number of dispensing units, but in no case less than two, with a means for cabin crew to use the supply. The dispensing units may be of a portable type. (b) The amount of first-aid oxygen required for a particular operation shall be determined on the basis of cabin pressure altitudes and flight duration, consistent with the operating procedures established for each operation and route. (c) The oxygen equipment provided shall be capable of generating a mass flow to each user of at least four litres per minute, STPD. Means may be provided to decrease the flow to not less than two litres per minute, STPD, at any altitude. (a) First-aid oxygen is intended for those passengers who still need to breath oxygen when the amount of supplemental oxygen required under CAT.IDE.A.235 or CAT.IDE.A.240 has been exhausted. (b) When calculating the amount of first-aid oxygen, the operator should take into account the fact that, following a cabin depressurisation, supplemental oxygen as calculated in accordance with Table 1 of CAT.IDE.A.235 and Table 1 of CAT.IDE.A.240 should be sufficient to cope with potential effects of hypoxia for: (1) all passengers when the cabin altitude is above 15 000 ft; (2) at least 30 % of the passengers, for any period when, in the event of loss of pressurisation and taking into account the circumstances of the flight, the pressure altitude in the passenger compartment will be between 14 000 ft and 15 000 ft; and (3) at least 10 % of the passengers for any period in excess of 30 minutes when the pressure altitude in the passenger compartment will be between 10 000 ft and 14 000 ft. (c) For the above reasons, the amount of first-aid oxygen should be calculated for the part of the flight after cabin depressurisation during which the cabin altitude is between 8 000 ft and 15 000 ft, when supplemental oxygen may no longer be available. (d) Moreover, following cabin depressurisation an emergency descent should be carried out to the lowest altitude compatible with the safety of the flight. In addition, in these circumstances, the aeroplane should land at the first available aerodrome at the earliest opportunity. (e) The conditions above may reduce the period of time during which the first-aid oxygen may be required and consequently may limit the amount of first-aid oxygen to be carried on board.				
1.770 CAT.IDE.A.235	REFERE TO RULE (a) Pressurised aeroplanes operated at pressure altitudes above				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
and AMC1 CAT.IDE.A.235 and AMC2 CAT.IDE.A.235	10 000 ft shall be equipped with supplemental oxygen equipment that is capable of storing and dispensing the oxygen supplies in accordance with Table 1. (a) In the determination of the amount of supplemental oxygen required for the routes to be flown, it is assumed that the aeroplane will descend in accordance with the emergency procedures specified in the operations manual, without exceeding its operating limitations, to a flight altitude that will allow the flight to be completed safely (i.e. flight altitudes ensuring adequate terrain clearance, navigational accuracy, hazardous weather avoidance etc.). (b) The amount of supplemental oxygen should be determined on the basis of cabin pressure altitude, flight duration and on the assumption that a cabin pressurisation failure will occur at the pressure altitude or point of flight that is most critical from the standpoint of oxygen need. (c) Following a cabin pressurisation failure, the cabin pressure altitude should be considered to be the same as the aeroplane pressure altitude, unless it can be demonstrated to the competent authority that no probable failure of the cabin or pressurisation system will result in a cabin pressure altitude equal to the aeroplane pressure altitude. Under these circumstances, the demonstrated maximum cabin pressure altitude may be used as a basis for determination of oxygen supply. OXYGEN REQUIREMENTS FOR FLIGHT CREW COMPARTMENT SEAT OCCUPANTS AND CABIN CREW IN ADDITION TO THE REQUIRED MINIMUM NUMBER OF CABIN CREW. (a) For the purpose of supplemental oxygen supply, flight crew compartment seat occupants who are: (1) supplied with oxygen from the flight crew source of oxygen should be considered as flight crew members; and (2) not supplied with oxygen by the flight crew source of oxygen should be considered as passengers. (b) Cabin crew members in addition to the minimum number of cabin crew and additional crew members should be considered as passengers for the purpose of supplemental oxygen supply.				
1.775 CAT.IDE.A.240 and AMC1 CAT.IDE.A.240	(a) General. 1. An operator shall not operate a non-pressurised aeroplane at altitudes above 10 000 ft unless supplemental oxygen equipment, capable of storing and dispensing the oxygen supplies required, is provided. 2. The amount of supplemental oxygen for sustenance required for a particular operation shall be determined on the basis of flight altitudes and flight duration, consistent with the operating procedures established for each operation in the Operations Manual and with the routes to be flown, and with the emergency procedures specified in the Operations Manual. 3. An aeroplane intended to be operated at pressure altitudes above 10				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	000 ft shall be provided with equipment capable of storing and dispensing the oxygen supplies required. (b) Oxygen supply requirements 1. Flight crew members. Each member of the flight crew on flight deck duty shall be supplied with supplemental oxygen in accordance with Appendix 1. If all occupants of flight deck seats are supplied from the flight crew source of oxygen supply then they shall be considered as flight crew members on flight deck duty for the purpose of oxygen supply. 2. Cabin crew members, additional crew members and passengers. Cabin crew members and passengers shall be supplied with oxygen in accordance with Appendix 1. Cabin crew members carried in addition to the minimum number of cabin crew members required, and additional crew members, shall be considered as passengers for the purpose of oxygen supply. Non-pressurised aeroplanes operated at pressure altitudes above 10 000 ft shall be equipped with supplemental oxygen equipment capable of storing and dispensing the oxygen supplies in accordance with Table 1. Table 1 Oxygen minimum requirements for non-pressurised aeroplanes Supply for - Duration and cabin pressure altitude 1. Occupants of flight crew compartment seats on flight crew compartment duty and crew members assisting flight crew in their duties - The entire flying time at pressure altitudes above 10 000 ft. 2. Required cabin crew members - The entire flying time at pressure altitudes above 13 000 ft and for any period exceeding 30 minutes at pressure altitudes above 10 000 ft but not exceeding 13 000 ft. 3. Additional crew members and 100 % of passengers (*) - The entire flying time at pressure altitudes above 13 000 ft. 4. 10 % of passengers (*) - The entire flying time after 30 minutes at pressure altitudes above 10 000 ft but not exceeding 13 000 ft. (*) Passenger numbers in Table 1 refer to passengers actually carried on board, including persons younger than 24 months. The amount of supplemental oxygen for sustenance for a particular operation should be determined on the basis of flight altitudes and flight duration, consistent with the operating procedures, including emergency procedures, established for each operation and the routes to be flown, as specified in the operations manual.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
PART B 11	**EMERGENCY EVACUATION PROCEDURES**				
1.1040 (l) ORO.MLR.100(k)	An operator must ensure that the contents of the Operations Manual are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe human factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.1045 Appendix 1 B 11.1 AMC3 ORO.MLR.100	Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment. Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment.				
1.1045 Appendix 1 B 11.1 AMC3 ORO.MLR.100	Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment. Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment.				
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1.280 and 1.1045 Appendix 1 B 11.1 GM1 CAT.OP.MPA.165 and AMC2 CAT.OP.MPA.165 and AMC1 CAT.OP.MPA.165 and AMC3 ORO.MLR.100	An operator shall establish procedures to ensure that passengers are seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aeroplane. Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment. Instructions for preparation for emergency evacuation including crew coordination and emergency station assignment. 'Direct access' means a seat from which a passenger can proceed directly to the exit without entering an aisle or passing around an obstruction. The following categories of passengers are among those who should not be allocated to, or directed to, seats that permit direct access to emergency exits: (a) passengers suffering from obvious physical or mental disability to the extent that they would have difficulty in moving quickly if asked to do so; (b) passengers who are either substantially blind or substantially deaf to the extent that they might not readily assimilate printed or verbal instructions given; (c) passengers who because of age or sickness are so frail that they have difficulty in moving quickly; (d)				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat
	passengers who are so obese that they would have difficulty in moving quickly or reaching and passing through the adjacent emergency exit; (e) children (whether accompanied or not) and infants; (f) deportees, inadmissible passengers or persons in custody; and (g) passengers with animals. The operator should make provision so that: (a) those passengers who are allocated seats that permit direct access to emergency exits appear to be reasonably fit, strong and able to assist the rapid evacuation of the aircraft in an emergency after an appropriate briefing by the crew (b) in all cases, passengers who, because of their condition, might hinder other passengers during an evacuation or who might impede the crew in carrying out their duties, should not be allocated seats that permit direct access to emergency exits. If procedures cannot be reasonably implemented at the time of passenger 'check-in', the operator should establish an alternative procedure which ensures that the correct seat allocations will, in due course, be made.				
1.1045 Appendix 1 B 11.2 AMC3 ORO.MLR.100	Emergency evacuation procedures. A description of the duties of all members of the crew for the rapid evacuation of an aeroplane and the handling of the passengers in the event of a forced landing, ditching or other emergency. Emergency evacuation procedures. A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of the passengers in the event of a forced landing, ditching or other emergency.				
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1.690 CAT.IDE.A.175	(a) An operator shall not operate an aeroplane with a maximum certificated take-off mass exceeding 15 000 kg or having a maximum approved passenger seating configuration of more than 19 unless it is equipped with a crew member inter- phone system except for aeroplanes first issued with an individual certificate of airworthiness before 1 April 1965 and already registered in a Member State on 1 April 1995. (b) The crew member interphone system required by this paragraph must: 1. operate independently of the public address system except for handsets, headsets, microphones, selector switches and signalling devices; 2. provide a means of two-way communication between the flight crew compartment and: (i) each passenger compartment; (ii) each galley located other than on a passenger deck level; and (iii) each remote crew compartment that is not on the passenger deck and is not easily accessible from a passenger compartment; 3. be readily accessible for use from each of the required flight crew stations in the flight crew compartment; 4. be readily accessible for use at required cabin crew member stations close to each separate or pair of floor level emergency exits; 5. have an alerting system incorporating aural or visual signals for use by flight crew members to alert the cabin crew and for use by cabin crew members to alert the flight crew; 6. have a means for the recipient of a call to determine whether it is a normal call or an emergency call; and 7. provide on the ground a means of two-way communication between ground personnel and at least two flight crew members. Aeroplanes with an MCTOM of more than 15000 kg, or with an MOPSC of more than 19 shall be equipped with a crew member interphone system, except for aeroplanes first issued with an individual CofA before 1 April 1965 and already registered in a Member State on 1 April 1995.				
AMC OPS 1.690 (b)(6) AMC1 CAT.IDE.A.175 (d)	1 The means of determining whether or not an interphone call is a normal or an emergency call may be one or a combination of the following: i. Lights of different colours; ii. Codes defined by the operator (e.g. Different number of rings for normal and emergency calls); iii. Any other indicating signal acceptable to the Authority. The crew member interphone system should: (d) have a means for the recipient of a call to determine whether it is a normal call or an emergency call that uses: (1) lights of different colours; (2) codes defined by the operator (e.g. different number of rings for normal and emergency calls); and (3) any other indicating signal specified in the operations manual;		AC		

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PART B 12	**AEROPLANE SYSTEMS**				
1.1040 (l) ORO.MLR.100(k)	An operator must ensure that the contents of the Aeroplane Systems are presented in a form in which they can be used without difficulty. The design of the Operations Manual shall observe Human Factors principles. The operator shall ensure that all personnel are able to understand the language in which those parts of the OM which pertain to their duties and responsibilities are written. The content of the OM shall be presented in a form that can be used without difficulty and observes human factors principles.				
1.1045 Appendix 1 B 12 AMC3 ORO.MLR.100	A description of the aeroplane systems, related controls and indications and operating instructions. A description of the aircraft systems, related controls and indications and operating instructions. Consideration should be given to use the ATA number system when allocating chapters and numbers.				

Respective legal reference	Requirement	Manual Reference	App/ Acc	Remarks (for Authority use only)	Doc Stat

Additional remarks

End of Compliance List