OPERATION INSPECTOR HANDBOOK

VOLUME 3

SURVEILLANCE OF AIR OPERATORS

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CHAPTER 1

SURVEILLANCE OF AIR OPERATOR: GENERAL INFORMATION, POLICY, AND PROCEDURES

1. PURPOSE.

The purpose of Volume 3 to this Manual of Air Operator Certification, Administration, and Surveillance, is to clearly define the responsibilities, goals, and methods for surveillance of airline flight operations by the DGAC.

2. BACKGROUND.

Section 4.2.1 of Part 1 to Annex 6 of ICAO Recommended Standards and Practices requires that member states issue air operator certificates or equivalent documents to air operators. The issuance of an air operator certificate shall be dependent upon the operator demonstrating an adequate organization and method of control and supervision of flight operations, and the continued validity of that certificate shall be dependent upon the operator's continuing maintenance of the standards which it demonstrated upon original issuance of the certificate. Member states must therefore perform surveillance of certificated operators in order to insure that operators continue to meet certification requirements and should incorporate provisions in their national legislation which permit government agencies which are responsible for aviation safety to conduct inspections of air operators.

It is important to make a clear distinction between surveillance and certification activities. Both are important aspects of an inspector's duties, and one should not take precedence over the other. Certification activities are required to license, certificate, or otherwise qualify an airmen or an airline to operate in a prescribed manner. Surveillance, on the other hand, is aimed at ensuring that the airmen or airline continue to adhere to the standards by which they were certificated or approved, through regular inspections of various aspects of an airline's operation.

3. OBJECTIVES OF THE DGAC SURVEILLANCE PROGRAMME.

The primary objective of surveillance is to provide the DGAC, by means of a variety of inspections, with an accurate, real-time, and comprehensive evaluation of the safety status of the air transportation system. This surveillance program objective is accomplished by inspectors performing the following:

- Determining each airline/operator's compliance with regulatory requirements and safe operating practices
- Detecting changes as they occur in the operational environment
- Detecting the need for regulatory, managerial, and operational changes
- Measuring the effectiveness of previous corrective actions

4. PLANNING AND EXECUTING SURVEILLANCE PROGRAMMES.

Surveillance is an important duty and the responsibility of all aviation safety inspectors assigned to the DGAC. Surveillance programs provide a method for the continual evaluation of operator compliance with government regulations and safe operating practices. Information generated from surveillance programs permits the DGAC upon deficiencies which affect or have a potential effect on aviation safety. For surveillance programs to be effective, they must be carefully planned and executed. Inspections are specific work activities within a surveillance program which should exhibit the following characteristics:

- A specific work activity title
- A definite beginning and a definite end
- Defined procedures
- Specific objectives
- A requirement for a report of findings (either positive, negative, or both)

Planning and executing any type of surveillance program may reasonably be broken down into four phases:

- Phase One Developing a surveillance plan by determining the types of inspections necessary and the frequency of those inspections
- Phase Two Accomplishing the surveillance plan by conducting the inspections
- Phase Three Analyzing surveillance data gathered from inspection reports and related information from other sources
- Phase Four Determining appropriate course of action
- A. Phase One: Developing a Surveillance Plan. Responsibility for the development of the annual operations surveillance program rests with the Surveillance Section. The surveillance program should recognize the need to conduct routine and ongoing surveillance, and should anticipate the possibility of special emphasis surveillance as a result of certain events such as accidents, incidents, repeated violations of DGAC, and evidence of financial problems. When planning a surveillance program, the DGAC must identify the program objectives, evaluate the resources available, and determine the specific types and numbers of inspections to be conducted in support of that program. Numbers of inspections should be established taking into consideration the current operating environment which the DGAC oversees (such as number of airplanes and variety of airplane types, number of crewmembers, routes, number and geographic location of transit stations, and the volume of training being conducted). Previous inspection reports, accident/incident information, compliance and enforcement information, and public complaints should also be used to determine both the types and frequency of inspections to be accomplished during a given time frame. History of compliance with regulations and cooperation with the

inspectorate may also be considered when developing a surveillance program for a specific airline.

- B. Phase Two: Conducting Surveillance Plan Inspections. During the conduct of the surveillance plan inspections, accurate and qualitative inspection reporting is essential. High quality inspection reporting is necessary for the effective accomplishment of the third and fourth phases of a surveillance program. The quality and standardization of inspection reporting will be enhanced through the use of the inspection checklists and report forms contained in this manual. Subsequent to the completion of the surveillance activity the appropriate DAC Form 8400 is submitted to the POI.
- C. Phase Three: Analyzing Surveillance Data. After the inspection data has been reported, an evaluation of the information obtained from inspection reports and related sources must be conducted. The purpose of this evaluation is to identify the areas of concern and note areas such as the following:
 - Non-compliance with regulations or safe operating practices
 - Both positive and negative trends
 - Isolated deficiencies or incidents
 - Causes of noncompliance, trends, or isolated Deficiencies

Evaluation of inspection results is a key phase of any surveillance program. The primary purpose of evaluating surveillance data is to identify both negative and positive trends as well as deficiencies which are not associated with an apparent trend. This evaluation of inspection results is also important in terms of redefining and implementing subsequent surveillance objectives and inspection activity. The POI must adopt systematic methods that permit accurate and effective evaluation of inspection results. Additionally, other related information from incidents, accidents, enforcement actions and other sources may provide valuable trend information which may relate to the operator's safety and compliance status. For example, if in a series of ramp inspection reports a trend of deficiencies in the use of the MEL is identified, but the cause of these deficiencies cannot be identified, the POI may need to adjust the emphasis on the types of inspections conducted. In this case, additional training program inspections, manual inspections, or flight control inspections (flight release procedures) may be more effective in determining the cause of these deficiencies.

D. Phase Four: Determining Appropriate Course of action. The Director General and the POI must use good judgment when determining the most effective course of action to be taken as a result of unsatisfactory inspection findings. The appropriate course of action often depends on many factors, many of which may be quite subjective. Various options which may be considered are: informal discussion with the operator and/or airman; formal written request for corrective action; withdrawal of DGAC approval for a program, manual, or document; and initiation of an investigation leading to formal enforcement/disciplinary action. Corrective action which an operator

or airman takes independently of the DGAC should be taken into account. The DGAC must also decide whether or not the results of a specific inspection should result in a modification of their current surveillance program. As previously mentioned, the DGAC may elect to conduct further inspections to determine if the unsatisfactory finding was an isolated incident or part of a trend.

5. GUIDELINES FOR FREQUENCY OF OPERATIONAL INSPECTIONS.

The minimum numbers of the various types of inspections contained in this manual which must be accomplished are as follows:

- A. *Manual Inspections*. All operations manuals, instructions, and procedures currently in use with Indonesia air operators will be reviewed within two years of adoption of this manual. Thereafter, all changes to manuals should be routed by the operator through the POI for concurrence. A complete review of each manual (AOM, AFM, MEL, Cabin Crew, etc., should be accomplished once every three years.
- B. Operations Control Inspections. One inspection annually for each airline.
- C. *Trip Records Inspections*. One inspection annually for each airline.
- D. Flight Time and Duty Records Inspections. One inspection annually for each airline.
- E. *Training Program Inspections*. Approved training manuals covering all types of training conducted by each airline ground, simulator, and flight should be reviewed for content and currency within two years after adoption of this manual. Thereafter, all proposed modifications or additions to training programs must be routed through the DGAC for concurrence.
 - One ground training course, two simulators training periods, and two flight training periods should be observed annually for each aircraft type operated by the carrier, to ensure compliance with the approved training manual and with company procedures and policies.
- F. Training Records Inspections. One inspection annually for each airline.
- G. Cockpit Enroute Inspections. Four random inspections annually on each aircraft type operated by each airline.
- H. Cabin Enroute Inspections. Four random inspections annually on each aircraft type operated by each airline.
- I. Station Facility Inspections. One inspection every two years at each transit base used by each airline.
- K. Ramp Inspections. Three inspections annually on each aircraft type operated by each airline.
- L. *Pilot Proficiency Check Inspections*. A sufficient number of inspections so that each examiner is observed at least once annually in the performance of his duties on at least one type of check which he is qualified to conduct.

It must be emphasized that the preceding are the minimum numbers which must be accomplished to fulfill the DGAC's surveillance responsibilities.

Whenever possible, taking into account inspector resources and the demand for certification activities, the POI will schedule a significantly larger number of inspections of cockpit crews, cabin crews, and training events.

6. SPECIFIC INSPECTION PRACTICES.

The remainder of this volume is devoted to the conduct and reporting of the various types of surveillance inspections required by ICAO. A surveillance program which includes all of the types of inspections which appear in the following chapters will ensure that the DGAC is adhering to the surveillance guidelines provided in Chap. 9 of the ICAO Manual of Procedures for Operations Certification and Inspection.

CHAPTER 2.

MAIN BASE INSPECTIONS: GENERAL

1. BACKGROUND AND OBJECTIVES.

Paragraph 9.6.5.1 of the ICAO *Manual of Procedures for Operations Certification and Inspection* states that Main Base Inspections should be performed at the operator's principal base of operations, sub-bases, and separate maintenance facilities; and the purpose of the inspection is to assess the suitability of the operator's organization, management, facilities, equipment, manuals, personnel, and training records. The operations portion of Main Base Inspections will be accomplished in six increments as follows:

- Operations Manual
- Operational Control
- Operations and Flight (Trip) Records
- Flight and Duty Time Records
- Training Program
- Training and Qualification Records

2. GENERAL INSPECTION GUIDELINES.

Inspectors should contact the operator well in advance to make appropriate arrangements for inspecting elements of the main base operation. Unlike many types of operations inspections which are most effective when conducted on short notice (such as Ramp Inspections and En-route Inspections) elements of the main base operation are not subject to rapid adjustments on the part of the operator in anticipation of the inspection, and the inspections are most productive following adequate notice and coordination. During the initial contact, the operator should be briefed in detail regarding the specific intent of the inspection, the areas to be covered, and the approximate duration of the Arrangements should be made to ensure that key company personnel will be present during the course of the inspections to provide information and answer questions. The required company presence will vary according to the type of inspection. For example, when evaluating Operational Control procedures and operations, the inspector will require almost constant contact with personnel who are responsible for each functional area. contrast, the inspection of Flight and Duty Time records requires very little company involvement except to make records available and answer any initial questions the inspector may have about the operator's record keeping system.

Before commencing each type of inspection listed in 2.1 above, inspectors should familiarize themselves to the maximum extent possible with the operator's manuals, policies, and instructions regarding the area to be inspected. In developing an annual work program, it is therefor sound practice to schedule an Operations Manual Inspection in advance of the other types of inspections contained in this chapter. This will provide the inspector

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with an overview of the operator's instructions and policies prior to evaluating their effectiveness in day to day practice. Before performing the individual inspections contained in chapters which follow, inspectors should review for a second time and in greater depth those portions of the operator's manual which pertain to the specific area to be evaluated. In that sense, all inspections which are conducted by operations inspectors become an extension of the formal evaluation of the operator's manual, because unsatisfactory performance in operational areas can often be traced to inadequate planning, guidance, and training.

Upon arriving at the site where the inspection is to be conducted, inspectors should introduce themselves and present their identification to the operator's representatives, if not personally known to them. The inspector should review with the operator the scope of the inspection to be conducted, and assemble key company personnel who are to be available to answer questions during the course of the inspection. The inspector should advise the operator that a time and place will be scheduled at the conclusion of the inspection to review its findings.

3. SPECIFIC INSPECTION PROCEDURES AND PRACTICES.

Detailed guidance regarding the conduct of the 6 types of inspections listed in 2.1 above, along with inspection checklists/report forms, are contained in Chapters 3 through 8 of this volume.

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CHAPTER 3

MAIN BASE: MANUAL INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

Paragraph 4.2.2 of Annex 6 Part 1 to the Chicago Convention requires that an operator must provide, for the use and guidance of operations personnel, an operations manual which will be amended or revised as is necessary to insure that information contained therein is kept up to date.

The objective of the DGAC's inspection of a carrier's operations manual is to substantiate that it:

- Implements ICAO International Standards and Recommended Practices and The Aviation Act. 15, 1995 and does not conflict with the regulations of any other state where operations will be conducted
- Provides clear, complete, and detailed instructions, policies, and procedures so that operational staff are fully informed of what is required of them. Procedures should be effective and represent sound safety philosophy. Through the proper use of this material it is expected that personnel will be able to perform their duties to a high degree of precision, thus resulting in safe and efficient operations.
- Presents necessary guidance and instructions to personnel in a suitable and convenient format.
- Outlines standardized procedures for all crew member functions

2. MANUAL ORGANIZATION.

In order to accomplish the above requirements and effectively organize policy and instructions, that portion of an operator's overall manual system which applies specifically to *operations* personnel is typically divided into several volumes such as:

- A. Company Operations Manual (COM) or Flight Operations Manual (FOM) which contains general guidance for flight crew members regarding company organization, policies, procedures, and aspects of flight operations which are applicable to several or all aircraft types which the company may operate.
- B. Aircraft Operating Manuals (AOM) or Aircraft Flight Manuals (AFM) which are specific to aircraft types and contain such information as operating limitations, aircraft equipment and systems, normal, abnormal, and emergency operating procedures and checklists, and performance data.
- C. A Flight Attendant Manual which contains general and specific information regarding Cabin Attendant policy and duties, cabin safety procedures, and information concerning cabin configuration and emergency equipment aboard the types of aircraft operated.
- D. Minimum Equipment Lists and Configuration Deviation Lists which contain guidance regarding the operation of aircraft with inoperative equipment of missing components.

E. A Flight Operations Officer or Dispatcher Manual which contains information regarding operational control of aircraft and dispatcher duties and procedures.

- F. A Weight and Balance Manual which contains information regarding aircraft loading and CG considerations
- G. A Route Manual which contains enroute charts, aerodrome approach plates, information about communications facilities, navigation aids, air traffic services, etc.
- H. A Training Manual which contains descriptions of approved training courses, flight maneuvers, training procedures, and qualification requirements for company flight operations personnel
- I. A Dangerous Goods Manual which describes procedures for the identification, labeling, and handling of hazardous materials.

The above list is presented as an example of one method for organizing the wide range of information required of an airline, and is not intended to be all-inclusive or typical of every operator. The overall manual system may be organized in any manner which adequately provides guidance concerning all important aspects of the carrier's operation. Very small operators may reasonably cover all of the required subject areas in one volume.

Note: Chapter 7 of this volume contains detailed guidance regarding Training Manual inspections.

3. SPECIFIC OPERATIONS MANUAL INSPECTION AREAS.

Inspectors should review the airline's operations manual or manual system to ensure that it contains information in sufficient detail to permit all flight operations personnel to perform their duties safely and efficiently. The following areas should be evaluated:

- A. Organization and readability. The manual or manuals should be organized so that information specific to various employee positions and types of operations is easy to locate, clear, concise, and unambiguous. Tables of contents should be detailed enough so that specific subject areas may be easily and expeditiously located. Type quality, illustrations, and graphics should be clear and readable. Poorly copied pages from manufacturers' data or from other operators' manuals should not be acceptable.
- B. Validity and accuracy. Technical information contained in manuals such as weight and balance charts, performance charts, limitations, etc. should accurately reflect data provided from the manufacturer or have been developed through the use of accepted and approved methods.
- A. Continuity. Information presented in the various sections or volumes of a manual should be consistent with that presented in other sections.
- B. Currency and Conformity. Information contained in manuals should reflect current company organization, equipment, procedures, and policies; ICAO standards and recommended practices, The Aviation Act. 15, 1992 and technical data. The manual(s) should be easy to update and contain a list of effective pages.

C. Distribution and Availability. The operator should have an effective system for distributing and updating manuals. There should be no question as to who has responsibility for entering changes in specific manuals. The DGAC must be provided with copies of all manuals.

- D. Approvals. Certain portions of the operator's manuals are normally reviewed in detail and require specific *signature approval* by the DGAC. These include, but are not limited to:
 - Aircraft operating limitations
 - Normal, abnormal, and emergency checklists
 - Minimum equipment lists
 - Training syllabi and procedures
 The DGAC tacitly accepts other portions of the operator's manual after its review.
- Content. The Air Operator Manual Inspection Checklist/Report form which appears at the end of this chapter will be used for all operations manual inspections. The focus of the manual inspection will be to evaluate the carrier's operations manual in the areas listed above. The "content" area of the form contains a checklist of the minimum subject areas which should be adequately addressed in the operator's manual(s). The checklist items in the "content" area are designed to be used for all operators, both domestic and international. Certain items may not apply to domestic operations. Training subjects are omitted because they are contained in Chapter 7 of this volume. The intent of the inspection is to generally review the operator's manual system and to ensure that all of these subject areas are at least addressed. An inspector will study many of these subject areas in detail in the course of preparing for and conducting other types of inspections (such as Operations Control inspections and Station Facility inspections) and may properly make more detailed assessments of the contents of those areas at that time.



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AIR OPERATOR OPERATION MANUAL INSPECTION CHECKLIST/REPORT

| Operator | Date | Location |
|----------|------|----------|
| | | |

S=Satisfactory; U=Unsatisfactory; P=Potential; I=Information; E=Exceeds; N=Not Observed

| A. GENERAL 20 | | |
|--------------------------------|---|--|
| 1 Organization and Readability | Oxygen Requirements and Use of Oxygen Crew Coordination and Callouts Communications including Public Address Systems Altimeter Settings Interception of Civil Aircraft Route, Navigation, and Aerodrome information Overweight Landings Flight Diversion Severe Weather Passenger Handling Briefings and Announcements Unruly Passengers Alcoholic Beverages Medical Emergencies Security Hijacking Hazardous Materials Cabin Baggage Policy Loading and Weight and Balance Control Search and Rescue Cockpit and Cabin Emergency Equipment description Location Use Reports/Notification Emergencies Deviations Hazardous Conditions Hazardous Conditions Hazardous Conditions Meteorological Inflight Irregularities Near Misses Pireps Cabin Emergency Proced. Flight Crew Incapacitation Ozone and Solar Radiation Emergency Evacuation | 44Ground to Air Visual Codes 45Refueling with Passengers on Board 46Long Range Nav |

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CHAPTER 4

MAIN BASE: OPERATIONAL CONTROL INSPECTION

1. BACKGROUND AND OBJECTIVES.

ICAO Annex 6, Part 1, Section 4.2 requires operators to demonstrate a method of control and supervision of flight operations. Section 5.4.4 of the ICAO *Manual of Procedures for Operations Certification and Inspection* contains general information regarding operations control organizations and sets forth specific areas to be inspected before an operator is certified. Annex 6 Chapter 10 sets forth standards and recommended practices regarding Flight Operations Officers (Dispatchers).

An operational control inspection has two primary objectives. The first objective is for the DGAC to ensure that the operator is in compliance with the minimum requirements of the Aviation Act. No. 15, 1992 and conforms to ICAO international standards and recommended practices. The second objective is for an inspector to ensure that the operator's system of control provides positive assurance of public safety. The operator must meet both objectives to obtain and retain an operating certificate or equivalent document. To make this determination, the inspector must evaluate the operator to ensure the following:

- Responsibility for operational control is clearly defined
- An adequate number of operational control personnel are provided
- Applicable manuals contain adequate policy and guidance to allow operational control personnel and flightcrews to carry out their duties efficiently, effectively, and with a high degree of safety
- Operational control personnel are adequately trained, knowledgeable, and competent in the performance of their duties
- Flight control personnel and flightcrews have been provided with the necessary information for the safe planning, control, and conduct of all flights
- The operator provides adequate facilities for flight control functions
- The operator performs all operational control functions required by the regulations
- The operator performs all functions necessary to provide adequate operational control in the environment in which operations are conducted
- Adequate emergency procedures and contingency plans have been formulated

2. GENERAL INSPECTION PRACTICES AND PROCEDURES.

Inspectors conduct operational control inspections through systematic manual reviews, records inspections, observations, and interviews.

- A. Inspector Preparation and Manual Review. Before starting an operational control inspection, the inspector must become familiar with the operational control provisions of the operator's manual system. This manual review is both the first step in the inspection process and preparation for subsequent steps. Such a review would be in addition to or in conjunction with the general evaluation of the operator's entire manual system which is addressed in Chapter 3 of this volume, and its purpose is to examine operations control policy and guidance in depth.
- B. Observations, Interviews, and Records Checks. The inspector should establish with the operator a mutually convenient time for conducting the interviews and records checks, and for observing flight control functions.
 - Inspectors should conduct interviews with both management and working-level personnel to meet inspection objectives. Inspectors should plan these interviews so that the required information can be obtained without unduly distracting personnel from their duties and responsibilities.
 - Inspectors should observe actual flight-release operations. Before beginning these observations, an inspector should request a tour of the operator's facility for general orientation. During this time, he may observe an operations control personnel performing a variety of job functions. If possible, these observations should be made during periods of peak activity, adverse weather, or during non-routine operations. Inspectors should ask pertinent questions of personnel regarding their individual duties and responsibilities and relationship to the overall operations control effort.
 - When possible, inspectors should observe dispatcher competency checks being conducted to evaluate the knowledge level of dispatchers and the performance of the supervisor.

Note: Detailed guidance concerning Flight Operations (Trip) records and Flight and Duty Time records is contained in Chapters 5 and 6 of this volume. Each type of records inspection has its own checklist and report form. These areas may be examined separately or in conjunction with the remainder of the operational control inspection areas.

3. SPECIFIC INSPECTION PRACTICES AND PROCEDURES.

The Air Operator Operational Control Checklist/Report form at the end of this section contains a list of specific inspection "reminders" which should adequately sample the effectiveness of the carrier's operations control organization, functions, and guidance. It will serve as both a checklist of items

to be covered and as a means of recording the results of the inspection. The following inspection areas will be evaluated:

A. Policies and Procedures

- (1). Authorized Operations.
 - The type of operations that may and may not be conducted should be clearly specified in manuals and other instructions (VFR, IFR, extended range, CAT II, etc)
 - The operator's policies applicable to each type of operation should be clearly stated
 - Geographic areas and destinations to which extended overwater flights or extended range operations may be conducted should be clearly specified

(2). Manuals.

- A section of the Operations Manual should be devoted to the policy and guidance for operational control
- If the operator conducts extended overwater or extended range operations, a separate section of the operations manual should contain key considerations regarding these types of operations
- The applicable section(s) of the Operations Manual should be readily available to dispatchers and flightcrews while they perform their duties

(3). Predeparture Functions.

The responsibility and procedures for accomplishing the following functions should be clearly defined and properly executed:

- Crew assignment
- Load planning
- Aircraft routing
- Flight planning
- Release of the aircraft from maintenance
- Control of MEL and CDL limitations. Required instruments and equipment should be installed and operational
- Compliance with flight operations limitations
- Weight and balance
- Performance Planning, including consideration of mass, elevation, temperature, wind, obstacles, etc.
- Adequate procedures for supervising and verifying these activities should be established
- The operator should have a means for the PIC and dispatcher to ensure that each of these functions has been satisfactorily accomplished before the aircraft departs

(4). Original Release.

 The conditions under which a flight may and may not be dispatched (type of operation, weather, crew compliment, load, etc.) should be clearly defined

- The conditions under which a flight must be re-routed, delayed, or canceled should be defined
- The flight release should contain all the necessary elements (see Chapter 2, Section 4)
- A written copy of weather reports and forecasts (including PIREPS) and NOTAMS should be attached to the release and provided to the flightcrew
- Extended overwater or extended range operations should be conducted under instrument flight rules
- Flight should not be commenced unless it is ascertained by every reasonable means that airports to be used are adequate for the operation

(5). Dispatcher Briefing.

- The operator's procedures should provide for briefing of the PIC by the dispatcher
- The minimum content of the briefing should be specified and adequate

(6). Dual Responsibility.

- The signatures of both the PIC and the Dispatcher should be required on the flight release
- The PIC's obligation to operate the flight according to the release, or to obtain an amended release, should be clearly stated

(7). Flight-Following.

- The dispatcher's flight-following requirements and procedures should be clearly identified
- Policy and guidance should be provided to flightcrews and dispatchers for monitoring fuel en-route
- Flightcrew reporting requirements and procedures should be clearly stated
- There should be specified procedures for dispatchers to follow when a required report is not received
- The operator should maintain a record of communications between the dispatcher and the flight
- Procedures should be established to notify flights en route concerning hazardous conditions relating to aerodromes, navigation aids, etc., and to report changes in forecast weather

(8). Planned Re-release. If the operator uses planned re-release procedures in connection with extended overwater operations, the following areas should be considered:

- A separate operational analysis should be prepared for the two routes and provided to the PIC, dispatcher, or flight follower.
- The re-release point should be common to both routes
- Re-release messages should be transmitted, acknowledged, and recorded. The message should include all requirements including NOTAM and weather information.
- The aircraft should meet landing performance requirements at the intermediate destination.

(9). Inability to Proceed as Released.

- Policy concerning the PIC's latitude to deviate from a dispatch release without obtaining a new release should be stated
- Specific and adequate direction and guidance should be provided to PIC's and dispatchers for the actions to take when a flight cannot be completed as planned (such as destinations or alternates below minimums, runways closed or restricted)
- Procedures to follow in case of diversion or holding should be specifically and clearly stated
- Procedures to be followed in case of an emergency procedure which results in deviation from local regulations or procedures should be clearly stated

(10). Weather.

- Weather reports should be obtained from a source approved by the DGAC
- Forecasts should be based on approved weather reports
- The operator have adequate procedures for updating weather information when the aircraft is delayed on the ground
- The operator should have adequate procedures for providing the latest available weather reports and forecasts to flightcrews while the flight is en route
- Procedures should be employed for disseminating information pertaining to turbulence, thunderstorms, and other adverse weather phenomena; and as well as the best routes for avoiding them
- The flight should not be released into know icing conditions unless equipped to cope with such conditions

(11). Aerodrome Operating Minima.

 If release under VFR is authorized, the forecast and actual weather reports should permit VFR flight over all portions of the route to be flown under visual flight rules

 IFR departure minimums should be consistent with CASR and specific DGAC approvals

- Takeoff alternates should be named on the dispatch release when flights are released with the departure airport below landing minimums, and should meet the requirements of ICAO Annex 6 Para 4.3.4.1 and applicable CASR
- Destination weather minimums should be clearly defined
- The operator should make provisions regarding weather minimums for "high minimums" (or "low time") captains
- When a flight is released to a destination below CAT I minimums, the airplane type should be equipped and authorized for CAT II or CAT III operations at that location and the captain should be properly qualified
- Destination alternates should be named on the dispatch release when required by CASR
- The weather at the named destination alternate airport should be equal to or better than that required by applicable regulations.
- Flights should not be continued toward the aerodrome of intended landing unless the latest available information indicates that operating minima can be complied with.
- (12). Minimum Enroute Altitudes. The operator should establish minimum enroute altitudes for routes flown, which should not be lower than those established by the DGAC.

(13). Selection of Alternates.

- Policy, direction, and guidance should be provided for the selection of takeoff, enroute, and destination alternates
- Terrain and engine-out performance should be considered in selecting an alternate

(14). NOTAMS

- NOTAM information should be available and utilized
- OMEGA AND NOTAMs should be provided to appropriate extended overwater operations

(15). Information.

- The operator should make adequate provisions for supplying airport and navigation information to pilots and dispatchers
- The operator should have an adequate method for providing data to dispatchers on takeoff and landing minimums at each airport. Dispatchers should have immediate access to such data

(16). Fuel and Oil Supplies.

 All increments of fuel required by ICAO Annex 6 and DGAC regulations (start & taxi, takeoff to arrival at destination, approach

and landing, missed approach, alternate fuel, holding, and contingency) should be provided. Special fuel provisions for extended range operations should be strictly adhered to.

- If aircraft are dispatched without an alternate, adequate contingency fuel should be carried for un-forecast winds, terminal area delays, runway closures, and contingencies
- Minimum fuel procedures should be specified for both dispatchers and PIC's and should be adequate for the environment in which operations are conducted

(17). Engine Out Performance Considerations.

- The operator should take into account engine out performance rules when applicable to specific routes and types of operations.
- Engine out performance analysis should be complete and accurate
- When possible, multiple ETP's should be provided for overwater flights and extended range operations.
- Adequate guidance should be available for driftdown computations and fuel dump requirements

(18). Emergency Procedures.

- Emergency action procedures and checklists should be published and readily available to operations control personnel for the following emergencies:
 - Inflight Emergency
 - o Crash
 - o Overdue or missing aircraft
 - o Bomb threat
 - Hijacking
- Operator should have available lists containing information on the emergency and survival equipment carried aboard its airplanes
- Provisions should be made to retain in safe custody the flight recorder of an airplane which becomes involved in an accident

(19). Changeover Procedures.

During shift changes, an adequate overlap should be provided for dispatchers and other flight operations control personnel to brief their oncoming counterparts.

- (20). Communications and Reports. Provisions should be made concerning the following:
 - In flight meteorological observations and reports
 - Reports of hazardous conditions other than meteorological
 - Coordination with ATS regarding operational instructions to aircraft in flight which change an ATS flight plan

B. DISPATCHERS AND METEOROLOGISTS.

- (1). Qualification.
 - All dispatchers should be certified in accordance with the DGAC regulations
 - Dispatchers should be successfully completed a competency check within a required eligibility period
 - Dispatchers should have completed route familiarization within a specified time period
 - Dispatchers at foreign locations should hold dispatcher certificates from the country of the operator
 - Any meteorologists who are employed by the operator should be qualified according to DGAC regulations and operator policy
- (2). Knowledge of Weather. Dispatchers should be:
 - Knowledgeable about the following weather conditions:
 - Surface (fronts, fog, low ceilings, etc.)
 - Upper Air (tropopause, jet streams)
 - Turbulence (pressure and temperature gradients)
 - Severe (Low level windshear, microburst, icing, thunderstorms)
 - Able to read terminal reports, forecasts, various weather depiction charts and upper air charts and interpret the meanings
- (3). Knowledge of the Area. Dispatchers should be:
 - Able to immediately recognize the airport identifiers for the airports in the area they are working
 - Generally familiar with the airports in the area they are working (number and length of runways, available approaches, general location, elevation, surface temperature limitations)
 - Aware of which airports in the areas they are working in are special airports, with regard to crew qualifications
 - Aware of the terrain surrounding the airports in the areas they are working
 - Aware of dominant weather patterns and seasonal variations of weather in the area
 - Aware of route segments limited by driftdown
- (4). Knowledge of Aircraft and Flight Planning. Dispatchers should have knowledge of:
 - The general performance characteristics of each airplane with which they are working (such as average hourly fuel burn, holding fuel, engine-out, drift-down height, effect of an additional 50 knots of wind, effect of a 4,000 ft. lower altitude, crosswind limits, maximum takeoff and landing weights, required runway lengths)
 - All of the elements contained in the operator's flightplan

- (5). Knowledge of Policy. Dispatchers should be:
 - Knowledgeable regarding DGAC policy and authorizations regarding such items as weather minimums
 - Aware of the provisions of the operators manual regarding all policies and procedures discussed in this section
- (6). Knowledge of Responsibilities. Dispatchers should be:
 - Knowledgeable of their responsibilities under the CASR (such as briefing PIC; canceling, re-scheduling, or diverting for safety; inflight monitoring; inflight notification of PIC)
 - Knowledgeable of their responsibilities under the operator's manual as discussed in paragraph A
- (7). Proficiency. Dispatchers should be:
 - Competent in the performance of their assigned duties
 - Alert for potential hazards
- (8). Duty Time. Regulatory requirements should be complied with. In the absence of regulatory requirements, shifts should be of a reasonable length and adequate rest time should be provided between shifts

C. SUPERVISORS.

- (1). Qualification. Supervisors of dispatchers should themselves be qualified and current as dispatchers
- (2). Conduct of competency checks. Competency checks which are administered by supervisors should be appropriate, thorough, and rigorous

D. FACILITIES AND STAFF.

- (1). Physical.
 - Working space should be adequate for the number of people working in the dispatch center
 - Temperature, lighting, and noise levels should be conducive to effective performance by operations personnel
 - Access to the facilities should be controlled
- (2). Information.
 - Dispatchers should be supplied with all the information they require (such as on flight status, maintenance status, load, weather, facilities)
 - Information effectively disseminated and displayed; and be quickly and accurately located
 - Real time weather displays should be available for adverse weather avoidance

(3). Communications.

 A dispatcher should be able to establish rapid and reliable voice communications with a captain at the gate and to be able to deliver a message to a flight en route and get a response within a reasonable time interval

- Dispatchers should be properly authorized and qualified to use all communications channels required for operational control
- Direct voice radio communications should be available between the control center and line stations to the maximum extent possible
- Backup communications links should be available in case of a failure of the primary links
- The operations control center should have adequate communications with appropriate ATS facilities

(4). Management.

- Overall responsibility for operations in progress should be assigned by the operator to one individual who can coordinate the activities of all of the dispatchers
- Adequate internal communications links to flow control type facilities and to high level management officials should be firmly established

(5). Workload.

- The operator should assign enough personnel to adequately handle the workload during periods of both normal and non-routine operations
- Dispatchers should have enough time perform both dispatch and flight-following duties in an effective manner Dispatchers should not be used to perform other functions such as clerks, maintenance officers, etc., to the detriment of their primary function
- Duty time restrictions for certificated personnel should be adhered to.



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OPERATIONAL CONTROL INSPECTION CHECKLIST/REPORT

Date

| S=Satisfactory; U=Unsatis | factory; I=Information; | E=Exceeds; N=Not Observed |
|--|---|---|
| PROCEDURES 1 Authorized Operations 2 Manuals 3 Predeparture Functions ! Crew assignment ! Load planning ! Aircraft routing ! Flight planning ! Release of the aircraft from maintenance ! Control of MEL and CDL limitations ! Compliance with flight operations limitations ! Weight and balance ! Adequate Supervision 4 Original Release. 5 Dispatcher Briefing. | 9 Inability to Proceed Released. 10 Weather 11 Aerodrome Operatir Minima 12 Minimum Enroute A 13 Selection of Alternative A 14 NOTAMS 15 Information 16 Fuel 17 Engine-Out Perform 18 Emergency Procedum 19 Changeover Procedum 20 Comm. and Reports B. DISPATCHERS AND METEOROLOGISTS 1 Qualification 2 Knowledge of Weat 3 Knowledge of Area 4 Knowledge of Aircraf Flight Planning | Responsibilities 6. Knowledge of Policy 7. Proficiency 8. Duty Time C. SUPERVISORS 1. Qualification 2. Conduct of Competency Checks D. FACILITIES AND STAFF 1. Adequacy of Facilities 2. Pertinent Information ! Comprehensive ! Disseminated ! Available ! Current 3. Communications |
| | actory I | NSPECTOR=S NAME AND SIGNATURE |
| DAC FORM 8400-4 (06-01) | sfactory | Page 1 of 1 |

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CHAPTER 5

MAIN BASE: OPERATIONS AND FLIGHT (TRIP) RECORD INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

ICAO Annex 6, Part 1, Para. 4.3.1 Requires that a flight shall not be commenced until flight preparation forms have been completed certifying that the PIC is satisfied that:

- The mass of the airplane is such that the flight can be conducted safely taking into account the flight conditions expected, and that the airplane load is properly distributed and safely secured.
- Operating limitations have been complied with and that instruments and equipment required for the particular type of operation to be undertaken are installed and sufficient for the flight.
- Operational flight planning has been conducted
- The airplane is airworthy and a maintenance release has been issued.

ICAO Annex 6, Part 1, Para. 4.3.2 requires that completed flight preparation forms be kept by the operator for a period of three months. Flight preparation forms meeting the above requirements and conforming to DGAC regulations commonly take the following forms: the load manifest, the dispatch or flight release, the flight plan, and the maintenance or airworthiness release.

The primary objective of operations and flight records inspections is to ensure that operators meet established operator procedures and appropriate CASR CASR for the proper preparation and retention of operational trip records. Inspectors can evaluate trip records to reconstruct a particular flight or a series of flights by examining flight plans, dispatch or flight releases, loading and weight documents, weather documents, and other related flight information retained by the operator. The inspector's evaluation provides the DGAC with the methods of information acquisition and dissemination used by the operator.

2. INSPECTION PRACTICES AND PROCEDURES.

Trip records inspections are normally conducted at the operator's principal base of operations. Operators should have established a system where transit stations forward all trip records information to one central location where the information is retained for the required time period. Some operators may have most of their trip records information stored in a computerized format.

A. Inspectors should contact the operator's personnel responsible for maintaining trip record files and advise them that an inspection shall be conducted. Upon arriving at the record keeping location, the inspector should properly identify himself and request records for a specific series of trips. This ensures that the operator has an effective means of storing record information and is capable of retrieving specific trip information at

the DGAC's request. Inspectors should also request space at the operator's facility to conduct the inspection. It is not recommended that inspectors to remove trip records from the operator's facility.

- B. Before conducting the actual inspection, inspectors should familiarize themselves with the operator's trip records procedures, formats, and means of disseminating information to flightcrews. If the inspector has previously completed an operational control inspection of the airline or is seconded from that airline, he should already have a working knowledge of the operator's system. Inspectors should pre-plan the inspection by deciding which specific areas should be concentrated upon, such as listing alternates, accurate fuel loads, dispatch release time versus actual blockout time, and accurate and timely weather information.
- C. During the conduct of the actual inspection, inspectors should examine all of the available documents for each flight and cross-check the information between the trip records. For example, the fuel load on a dispatch release should agree with the fuel load on the load manifest, the flight plan, and the fuel slip (if available).
- D. The Airline Operations and Flight Records Inspection Checklist/Report form which is included at the end of this chapter closely follows the information and requirements presented in paragraph 5.3 of this chapter.

3. TRIP RECORDS INSPECTION AREAS.

Operations and flight (trip) records are divided into five general areas as follows:

- A. General Inspection Area. This inspection area refers to those inspection elements that are common to all trip records. Inspectors should evaluate such items as record availability, practicality, legibility, currency, continuity, and conformity as they relate to regulatory record keeping requirements. Inspectors should ensure that each trip record package they examine contains all of the required information and that it pertains to the actual flight it represents. Each document should have a date, flight number or a trip number, and an aircraft registration number which clearly identifies the applicable flight.
- B. Flight Plan Inspection Area. This inspection area refers to the flight planning requirements which may be applied to most scheduled airline operations. Inspectors should evaluate flight plan content. Many operators incorporate the flight plan and the dispatch/flight release into one document. This is acceptable and reduces the duplication of information that may be required by both documents. The flight plan should contain the following information:
 - Aircraft registration number and type of aircraft
 - Flight number
 - Name of the PIC (usually found on the dispatch release)
 - Point and proposed time of departure
 - Proposed route, cruising altitude (or flight level), and true airspeed at the cruising altitude
 - Minimum flight altitude and aerodrome operating minima

 Point of first-intended landing and the estimated elapsed time until over that point

- Amount of fuel on board (in hours)
- An alternate airport, if required by ICAO Annex 6, Part 1, Para. 4.3.4.3 or as specified in appropriate CASR.
- Number of persons in the aircraft, except where that information is otherwise readily available to the DGAC
- Any other information the PIC or ATC believes is necessary for ATC purposes
- C. Dispatch/Flight Release Inspection Area. A dispatch or flight release and a flight plan is normally executed and signed by both the PIC and the dispatcher (flight operations officer) for the following types of flights
 - All scheduled flights
 - All extra section (unscheduled) flights
 - All charter flights
 - All ferry flights
 - All proving flights
 - All flights undertaken to reposition an airplane after landing at an unscheduled airport

The dispatch or flight release should contain the following information:

- Aircraft identification number
- Trip number
- Departure airport, intermediate stops, destination airports, and alternate airports
- A statement of the type of operation (IFR or VFR)
- Minimum fuel required
- Weather reports and forecasts for the destination airport, each intermediate stop, and any alternate airport that is the latest information available at the time the release is signed

With regard to minimum fuel required, ICAO Annex 6, Part 1, Section 4.3.6 gives international standards for required fuel based on type of airplane and operation. Section 4.2.9.2 requires operators to keep fuel and oil records for at least three months. Inspectors should examine records to ensure that they include an annotation of the minimum fuel required to conduct the flight, and that this fuel load is in accordance with ICAO standards and applicable CASR. Many operators will provide a breakdown of fuel loads such as trip fuel, alternate fuel, reserve fuel, and holding fuel. When examining fuel figures, inspectors should cross-check the dispatch or flight release fuel quantity (or weight) with the load manifest fuel quantity (or weight) to ensure that the figures are the same. Additionally, inspectors must ensure that the operator's flight plan includes the amount of fuel on board (in hours), and that this figure agrees with the figures for the amount of fuel annotated on both the flight release and the

load manifest. Inspectors may obtain hourly fuel burn information from the cruise control charts in the applicable Airplane Operating Manual (AFM).

The operator must comply with CASR time limits for the validity of a dispatch or flight release. If flights are delayed beyond a prescribed time, they must be re-released prior to departure. To ensure the operator is re-releasing flights as required, inspectors should determine the actual departure times from company logs, ATC tower logs, or some other means, and then compare those times with the dispatch or flight release times (as applicable).

- D. Load Manifest Inspection Area. Each trip records package, regardless of the type of operation, should contain aircraft weight, balance (CG), and loading information. Passenger and cargo weight information must be accurately reflected on the load manifest. Inspectors should inspect and validate the operator's loading documents to ensure their accuracy and compliance with the CASR, manufacturer's data, and the aircraft load data sheet. The load manifest should contain the following information:
 - The individual weights of the aircraft, fuel and oil, cargo and baggage, passengers, and crewmembers
 - Maximum allowable takeoff weight for the runway to be used (both runway-limited and climb-limited weights)
 - Maximum allowable takeoff weight (considering anticipated fuel and oil consumption rates) that shall allow compliance with en route performance limitations, destination landing weight limitations, and destination or alternate landing distance limitations
 - The total aircraft takeoff weight as computed under approved procedures
 - Documentation that the aircraft is properly loaded with the center of gravity within approved limits Passenger names, unless such information is maintained elsewhere by the operator

Operators may have systems which result in weight and balance "finals" being transmitted to the flightcrew via ACARS or company radio frequencies after the aircraft has departed the gate or ramp area. This information, which normally consists of adjusted takeoff gross weight and trim settings, is critical to the crewmembers for accurately determining the takeoff data. Inspectors should ensure that the information contained on the load manifest accurately portrays the actual passenger and cargo weights.

- E. Airworthiness Release Area. An airworthiness and/or maintenance release should be prepared in accordance with the procedures set forth in the operator's manual and should certify that the following conditions have been met:
 - Any work performed on the aircraft was performed in accordance with the requirements of the operator's manual
 - All items required to be inspected were inspected by an authorized person who determined that the work was satisfactorily completed
 - No known condition exists that would make the aircraft un-airworthy

Concerning the work performed, the aircraft is in condition for safe operation

Note: The airworthiness release should be signed by an authorized certificated mechanic, repairman, or an authorized official of a repair station that is responsible for the completed work. A certificated repairman should sign the release or entry only for the work for which he is employed and certificated to accomplish. Additionally, the operator may state in the operator's manual that the signature of an authorized certificated mechanic or repairman constitutes certification that the preceding conditions have been met without the requirement of restating all the required conditions.

F. Other Required Documents Inspection Area. This inspection area refers to such items as pertinent weather forecasts, NOTAM's, fuel slips, route certification requirements (if applicable), and other documents that are issued to flight crewmembers before each flight.

4. REPORT PROCEDURES.

The Air Operator Operations and Flight Records Inspection Checklist/Report form which is included at the end of this chapter will be used for recording the results of such inspections.



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OPERATIONS AND FLIGHT (TRIP) RECORD INSPECTIONS CHECKLIST/REPORT

Date

| C-Catiofactamy II-Unactiofactamy B. Batawtiel, I-Information, E-Evacada | | | | |
|--|--|--|--|--|
| S=Satisfactory; U=Unsatisfactory; P=Potential; I=Information; E=Exceeds | | | | |
| A. GENERAL 1. Availability | C. DISPATCH/FLIGHT RELEASE | ! Landing Weight Limits ! Alternate Distance 3. Reflects Total Takeoff | | |
| 2Practicality 3Crrency 4Legibility 5Accuracy 6Conformity B. FLIGHT PLAN 1Contains the Following Elements: ! Type Aircraft ! Aircraft Registration No. ! Flight No. ! PIC Name ! Point of Departure ! Proposed Time of Departure ! Proposed Route, Cruising Altitude, and TAS ! Minimum Flight Altitude & Aerodrome Oper. Minima ! Point of Intended Landing ! ETA ! Amount of Fuel on Board (in Hours) ! Alternate Airport (If Required) ! Numbers of Persons on Board | 1 Contains the Followin Elements: ! Aircraft Identificatio! Trip or Flight Numb! Departure Airport! Intermediate Stops! Type of Operation (IFR or VFR)! Minimum Fuel Req! Weather Reports a Forecasts D. LOAD MANIFEST 1 Contains the following Individual weights: ! Aircraft! Fuel and Oil! Cargo and Baggag! Passengers! Crew 2 Contains Maximum Allowable T/O Weight in Consideration of: ! Runway Limits! Climb Limits! En Route Perform | Weight 4Reflects Load Distribution and CG Limits E. AIRWORTHINESS RELEASE 1Certifies Following | | |
| Remarks (Continue on back if necessary): | | | | |
| | | | | |
| | | SPECTOR=S NAME AND SIGNATURE | | |
| Unsa | atisfactory | | | |

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CHAPTER 6

MAIN BASE: FLIGHT AND DUTY TIME RECORD INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

ICAO Annex 6. Part 1, Section 4.2.10 states that an operator shall formulate rules limiting the flight time and duty periods of flight crew members. These rules shall also make provisions for adequate rest periods and shall be such as to ensure that fatigue occurring either in a flight or successive flights or accumulated over a period of time due to these and other tasks, does not endanger the safety of the flight. These rules shall be approved by the state of the operator and included in the operations manual. Attachment A to Part 1 of Annex 6 discusses points which States should consider when formulating flight, duty time, and rest period rules for their operators.

Annex 6 Section 4.2.10 further states that an operator shall maintain current records of flight time of all flight crew members. Paragraph 5.4.3.2 of the ICAO *Manual of Procedures for Operations Certification and Inspection* recommends that flight records be examined to check compliance with statutory regulations relating to flight and duty time limitations.

2. GENERAL INSPECTION PRACTICES AND PROCEDURES.

At the commencement of the inspection, inspectors should receive a briefing from responsible employees of the operator regarding their flight and duty time record keeping system in its entirety. The inspector should then review a sufficient number of records for individual crewmembers to ensure that regulatory requirements are being met. Figures which are used in flight time summaries (cumulative totals) to track required time intervals should be checked against original flight logs or similar records, to ensure that times for specific flights are being accurately recorded and totaled. Similarly, flight times which appear on flight logs and summaries may be checked against maintenance or payroll records for continuity.

If individual crewmembers participate in more than one type of operation for which different regulatory requirements exist (e.g. domestic vs. international), the inspector should determine that the operator has devised methods to ensure that corresponding flight and duty time limitations are not exceeded.

3. INSPECTION AREAS.

Operators must develop methods for recording and monitoring flight and duty time for flight crew members to ensure that regulatory limitations are not exceeded. Such a record keeping system should have the following attributes:

- Adequacy. The recordkeeping forms which the operator uses are adequate for recording essential information which the DGAC requires.
- Practicality. The operator's method for recording flight time for individual crew members should be easy for employees to use. Forms which are developed for this purpose should be unambiguous and easy to complete.

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If an operator uses ACARS or a similar system for reporting flight and duty time, personnel should be properly trained in its use.

- Accessibility and Security. Data regarding flight and duty time should be readily accessible to personnel which have responsibility for monitoring compliance with various time intervals. Records should be secure from tampering by unauthorized individuals.
- Currency. Data available to personnel responsible for ensuring that individual crewmembers do not exceed regulatory or contractual requirements should be updated expeditiously. The system used by the operator should provide that schedulers and/or flight control personnel are immediately aware when daily totals may be exceeded. Flight time totals from written crew logs must be expeditiously transmitted to the scheduling or flight control office, so that weekly and monthly totals, where required, may be promptly updated.
- Accuracy. The system should faithfully track daily flight and duty time for crewmembers, and accurately reflect totals for longer prescribed time intervals.
- **Conformity**. The records should reflect conformance with regulatory flight and duty time limitations.

4. INSPECTION REPORTING PROCEDURES.

The Air Operator Flight and Duty Time Inspection Checklist/Report form which appears at the end of this section reflects the areas discussed in paragraph 7.3 above and will be used for all such inspections. Inspectors should indicate the scope of their records inspections in the comments section of the report form (i.e. number of individual airmen records inspected, time interval covered, crosschecks with other records).

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Location

Date

Air Operator Flight and Duty Time Records Checklist/Report

| | S=Satisfactory; U=Unsatisfactory; P | =Potential; I=Information; E=Exceeds |
|-------|---------------------------------------|--------------------------------------|
| 1 | ADEQUACY. Comments: | |
| | | |
| | | |
| 2 | PRACTICALITY. Comments: | |
| | | |
| | | |
| 3 | ACCESSIBILITY and SECURITY. Comments: | |
| | | |
| 4 | ACCURACY. Comments: | |
| | | |
| | | |
| 5 | CURRENCY. Comments: | |
| | | |
| | | |
| 6 | CONFORMITY. Comments: | |
| | | |
| | | |
| OVERA | LL RESULT: Satisfactory | INSPECTOR=S NAME AND SIGNATURE |
| | Unsatisfactory | |

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CHAPTER 7

MAIN BASE: TRAINING PROGRAM INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

Part 1 to ICAO Annex 6 Paragraph 9.3 requires that operators establish and maintain a ground and flight training program, approved by the state of the operator, which ensures that all flight crew members are adequately trained to perform their assigned duties. In order to accomplish this, the operator should provided adequate ground and flight training facilities and adequately trained instructors. Inspections of the many components of such a training program are an important part of an overall DGAC surveillance program. These inspections are best planned and executed over a period of time that permits a thorough and ongoing evaluation of an operator's training program. This chapter describes a surveillance strategy for training program inspections that is modular in design and that can be flexibly implemented into an overall surveillance plan.

The primary objective of a training program inspection is to ensure that the operator's overall training program continues to provide quality instruction by conducting an evaluation of the training program curriculums, facilities, instructors, company check pilot, courseware, instructional delivery methods, and testing and/or checking procedures, which were previously approved by the DGAC.

Training program inspections also provide the DGAC with the ability to require changes in an operator's training program, to rescind an initially or finally approved program (or segments of that program), and to maintain a current and accurate appraisal of the program's status and ability to train competent and capable flight crewmembers.

2. TRAINING PROGRAM INSPECTIONS AREAS.

Training programs vary widely in their complexity depending on the operator's size, aircraft fleet diversification, number of crewmembers, training locations, and scope of operation. Training program inspections involve much more than simply observing and evaluating training in progress. Four primary inspection areas may be identified as areas to be observed and evaluated:

- Training manual or curriculums
- Courseware
- Instructional delivery methods
- Testing and checking

Information concerning these four areas is as follows:

A. Training Curriculums Inspection Area.

Inspectors should evaluate the operator's approved training curriculums. Inspectors should ensure that these training curriculums are consistent

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with regulatory and general guidance for the type of operation being The inspector should evaluate the curriculums and their conducted. associated outlines that are currently being used by the operator. The inspector should ensure that the curriculum outlines contain enough descriptive detail to ensure that the main features of each principal subject will be addressed during the course of instruction. The DGAC will maintain a copy of each initially or finally approved training curriculum for every operator. This is usually the best source document available for inspectors to review before evaluating currently used curriculum outlines. Inspectors should evaluate each of the operator's curriculum outlines to ensure that the subject matter is current and appropriate in depth and scope, and also to gain an adequate understanding of what kinds of subject matter will be observed and evaluated during later phases of the inspection. The following is a list of basic curriculums typical of both domestic and international operators. These should be reviewed for all crewmember positions and dispatchers:

- Basic Indoctrination Aircraft Ground Training
- Emergency Training
- Flight Training (flight crewmembers only)
- Differences Training (if applicable)
- Recurrent Training
- Prequalification Training
- Special Curriculums
- Qualification Curriculums

Special curriculums include training which is in addition to the regulatory training requirements, such as crew resource management (CRM) training. Qualification curriculums include training of pilots to conduct CAT II and III approaches and various route qualification courses.

B. Courseware Inspection Area.

Inspectors should examine an operator's courseware, such as lesson plans, instructor guides, computer software or audiovisual programs, and hand-outs. The courseware should be examined to ensure that it is consistent with the curriculum outline and be organized to permit effective instructional delivery. The courseware should also be examined to ensure it is current, effective, and germane to the various instructional delivery methods.

C. Instructional Delivery Methods Inspection Area.

Inspectors should ensure that the operator's various instructional delivery methods, such as lectures, workshops, slide tape presentations, training devices, and simulators are sufficient to convey information to a student. These methods should be evaluated to ensure that they are effectively creating a transfer of learning to the student, that they are being maintained as originally approved, and that they are updated as necessary.

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D. Testing and Checking Inspection Area.

Part 1 of Annex 6, Paragraph 9.3.1 requires that a training program shall include examinations to determine competence. Paragraph 9.4.4 requires that pilots receive proficiency or competency checks. Observing testing and checking is the primary method by which an inspector can determine if learning has occurred. In this inspection area the inspector can evaluate the operator's standards, reflected by pass/fail rates, which determine whether a desired level of knowledge and skill has been acquired by the students being trained. The inspector should examine the operator's training records to ensure the operator's regulatory compliance with testing, checking, and other training program requirements. Additionally, company check pilots and instructor programs should be examined as the functional quality control element within this area.

3. GENERAL TRAINING PROGRAM INSPECTION PRACTICES AND PROCEDURES.

The five primary inspection areas previously outlined should constitute the core areas of an operator's training program that were evaluated by the DGAC before the issuance of final approval. These inspection areas apply to all operators and vary only in their complexity from operator to operator.

In certain situations, there may be a requirement for the DGAC to initiate a "special emphasis" training program inspection of one or more specific areas. This type of inspection may be initiated for several reasons such as an incident, an accident, or a series of deficiencies discovered through trend analysis of surveillance data. Special emphasis training program inspections usually focus on a limited area, such as use of checklists or windshear training, and are relatively short in duration.

Before the inspector can inspect any particular training program area, the inspector should introduce themselves to the instructor or company check pilots conducting the training and display his DGAC credentials. The inspector should then inform them that an DGAC inspection of training in progress will be conducted. Inspectors should refrain from active participation in the training being conducted and should make every effort not to influence the training environment or the instruction in the subject matter. If an inspector has comments on any of the areas of training being conducted, the inspector should reserve the comments for the debriefing with the instructor or company check pilots after the training session.

4. SPECIFIC TRAINING PROGRAM INSPECTION PROCEDURES.

The four areas discussed in 7.2 above must be carefully considered before granting approval to a training curriculum. Because these areas are broad in terms of scope and context, their key elements have been organized into 10 categories in order to provide a flexible inspection strategy. This approach permits the many components of an operator's training program to be broken down into manageable inspection areas, and provides inspection data which lends itself to meaningful interpretation. This means the Inspector has more

latitude in terms of scheduling specific types of inspections, maximizing inspector resource capabilities, and in determining the sequence of the various types of inspections to be conducted. An inspection of any of the following categories may be conducted as an independent inspection, or categories may be combined when examining a specific training curriculum in detail:

- A. Training Curriculum. The inspector should evaluate each of the operator's approved training curriculums, primarily for format and content. Ideally, each should contain the following:
 - Title. Each curriculum should be appropriately titled with a specific crewmember position (or positions, such as PIC/SIC) and the relevant category of training.
 - List of Effective Pages. Each curriculum should have a list of effective pages and a means to record revisions
 - Approvals. Each page of the curriculum (for finally approved programs) should be signed, dated, and stamped by an operations inspector.
 - Detail. Each curriculum should include comprehensive outlines of course material contained therein in sufficient detail to determine adequacy of coverage.
 - Hours. The total number of training hours should be specified for each curriculum
 - Objective. Each curriculum should list a training objective
 - Currency. The information contained in each curriculum should be current and may not be contrary to the regulations or safe operating practices. Company bulletins, notices, information letters and other means of conveying new or revised information to crewmembers should have been, or are in the process of being, incorporated into the appropriate curriculums
 - Conformity. Scope and content of each curriculum should conform to DGAC and ICAO requirements
- B. Instructor Courseware. In this module, the inspector should evaluate the operator's instructor guides, lesson plans, and/or training outlines. Ideally, this courseware should have the following characteristics:
 - *Title*. Instructor courseware should be clearly titled for the appropriate curriculum
 - Detail. It should contain sufficient information to permit the instructor to conduct detailed instruction for each subject area
 - Usability/Practicality. It should contain instructional material in a logical order and sequence that is relatively easy to use
 - Consistency. It should be consistent with the curriculum outline
 - References. It should have references to the applicable operator's manuals and publications
 - Validation. Instructor courseware should include some means for determining that the students are properly assimilating the instructed material (such as "responder" panels, multiple-choice questions, or in-class exercises)

C. Student Courseware. In this module, the inspector should evaluate the information in all of the various "self teaching" training mediums such as video tapes, audiovisual (carousel-type) slide presentations, computer-based training presentations, programmed learning publications, and home-study materials, as follows:

- Consistency. The information should be consistent with the curriculum outline It should be current with information in the operator's manual and other publications
- Detail. It should have sufficient detail to ensure that students can clearly understand the applicable subject area
- Validation. The courseware should include some means of testing student assimilation of information presented
- D. Training Facilities/Environment. The inspector should evaluate the operator's training facilities as follows:
 - The training facilities and the instructional environment should be conducive to learning by providing adequate seating space for students, storage areas for training materials, and facilities for instructors to prepare their lessons
 - The facility should be free of distractions which adversely affect instructional delivery, such as excessive temperatures, extraneous noise, poor lighting, and cramped classrooms and/or work spaces
- E. Ground Instructors. The inspector should evaluate the quality of instruction provided by ground instructors as follows:
 - Training. Instructors should be adequately trained in accordance with the operator's approved program and be appropriately documented in the operator's training records
 - Knowledge. Instructors should be knowledgeable in the specific area of instruction and in the operator's training policies and procedures, form completion requirements.
 - Instructional Technique and Delivery. Instructors should exhibit satisfactory instructional methods and techniques. They should be able to present the material in a logical, clear, and organized manner
 - Adherence. Instructors should follow the applicable lesson plans, guides or other training aids to ensure the material is properly presented as designed.
- F. Flight instructors. In addition to the areas listed in paragraph E. above, Flight instructors should be evaluated in the following specific areas:
 - *Proficiency*. Flight instructors should be highly proficient in the operation of aircraft, flight simulators and training devices, and in the performance of maneuvers and procedures which they are teaching.
 - Briefing. Flight instructors should provide a thorough preflight briefing (for flight training devices, flight simulators, or the aircraft) on all maneuvers and procedures that will be conducted

 Debriefing. Flight instructors should provide a thorough post-flight debriefing to review each individual student's performance during a training session

 Evaluation. Flight instructors should properly evaluate student progress and provide or recommend additional training when necessary

During evaluations of flight training, the instructor should adhere the events listed for the specific flight training curriculum. Instructors may deviate when necessary, however, to accommodate events from previous or subsequent flight training sessions. Every effort should be expended to alleviate artificiality from the training session and the instructor should be accorded a certain measure of flexibility to ensure the highest level of realistic training is achieved.

- G. Training Aids and Equipment. The inspector should evaluate the operator's training aids and equipment such as audiovisual equipment, systems mock-up boards, panel layouts, ground training devices, instructor station equipment, student responders (if applicable), and other related items, in terms of equipment. Ideally, the following conditions will prevail:
 - Instructions for use. Any equipment designated to be used for "self teaching" purposes (such as CBT platforms) should have clear operating instructions readily available for the student's use
 - Condition. All equipment used in the training program should operate and function in good working order (Replacement parts or components such as slide projector lamps, should be readily available.)
 - Fidelity. Systems panels, layouts, boards, or mock-ups (such as aircraft exit mock-ups) should accurately represent the designated aircraft
- H. Flight Simulators and Training Devices. It is not intended for the inspector to conduct an extensive flight evaluation of the training device or simulator but rather to evaluate the following: the general condition of the equipment, any significant periods of "down time" (and the reasons for the down time), and the operator's general ability to maintain the equipment as approved. The inspector should evaluate the operator's flight simulators and/or flight training devices, as follows:
 - Approval. Flight simulators and flight training devices should be approved by the DGAC and periodically inspected. Inspectors should review the operator's record of simulator evaluations and approval information to ensure compliance.
 - Condition. Flight simulators and flight training devices should function at the same level as when they were initially approved. Inoperative or defective equipment should be properly documented along with the training events that are affected by the inoperative or defective components.

 Publications. Published instrument approach charts, SID's, STAR's, en route charts, and other information (such as aircraft performance manuals and takeoff/landing data charts) which are contained within the simulator or training device should be current and in generally good condition.

- I. Company checks pilots and Examiners. The inspector should evaluate the following elements:
 - Staffing. The number of Company check pilots and examiners employed by the operator should be adequate for the level of training and checking activity
 - Training and qualification. Training records should reflect that Company check pilots and Examiners are qualified in accordance with applicable regulations and the operator's approved training program
 - Standardization. The operator should have an effective standardization program to ensure that Company check pilots and examiners conduct oral and flight examinations in a uniform manner
 - Level of activity. The number of examinations that a Company checks
 pilots or examiner conducts each year should be sufficient to maintain
 currency and proficiency in performing the performance of his duties.

5. INSPECTION REPORTING PROCEDURES.

This chapter has provided a broad overview of the many areas of an operator's training program that must be evaluated during the Inspector's annual work program. The *Air Operator Training Inspection Checklist/Report* form which appears at the end of this chapter will be used for all such inspections. It contains the major inspection areas which were discussed in this chapter, broken down into the categories described in paragraph 7.5 of this chapter. This form is designed to be flexible, and appropriate sections should be completed to indicate the scope or content of an inspection which has been conducted. The scope of the inspection should be indicated in the "curriculum" block at the top of the page (e.g."B-747-400 Pilot Recurrent Ground Training").



Operator

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Location

AIR OPERATOR TRAINING PROGRAM INSPECTION CHECKLIST/REPORT

Date

| Curriculum or Segment Inspected | | | | | | |
|---|--|---|---|--|--|--|
| S=Satisfactory; U=Unsatisfactory; P=Potential; I=Information; E=Exceeds | | | | | | |
| A. TRAINING CURRICULUM | D. TRAINING FACILITIE AND ENVIRONMENT | | FLIGHT SIMULATORS AND RAINING DEVICES | | | |
| 1 Appropriate Title(s) 2 List of Effective Pages 3 Record of Revisions 4 CAA Approved 5 Sufficient Detail 6 Training Hours Specified 7 Objective(s) Stated 8 Currency 9 Conformity B. INSTRUCTOR COURSEWARE 1 Title 2 Detail 3 Usability/Practicality 4 Consistency 5 References 6 Validation C. STUDENT COURSEWARE 1 Consistency 2 Detail 3 Validation | 1. Classroom Space 2. Storage Space 3. Instructor Areas 4. Lighting 5. Noise and Temp E. GROUND INSTRUCT 1. Training 2. Knowledge 3. Instructional Temp 4. Adherence F. FLIGHT INSTRUCTO 1. Training 2. Knowledge 3. Proficiency 4. Instructional Temp 4. Instructional Temp 5. Adherence 6. Briefings 7. Debriefings 8. Evaluation G. TRAINING AIDS AND EQUIPMENT 1. Instructions for 10 2. Condition 3. Fidelity | 1. 2. 3. 1. 2. 3. 2. 3. 4. 2. 2. 3. 2. 2. 3. 2. 2. 3. 2. 2. 3. 2. 2. 3. 3. 2. 2. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. | Approval Condition Publications CHECK AIRMEN Staffing Training and Qualification Standardization Level of Activity ORAL AND PRACTICAL TEST STANDARDS Conform to Accepted Int'l Standards Comply with Regulations QUALITY CONTROL Training Adequately Monitored Utilizes Progress Evaluations Training Folders | | | |
| | | | | | | |
| OVERALL RESULT: Satis | INSPECTOR: | S NAME AND SIGNATURE | | | | |
| DAC FORM 8400-7 (06-01) | atisfactory | | Page 1 of 1 | | | |

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CHAPTER 8

MAIN BASE: TRAINING AND QUALIFICATION RECORD INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

Paragraph 9.6.5.6 of the ICAO *Manual of Procedures for Operations Certification and Inspection* states that inspectors should ensure that records are available for each company employee who is required to receive flight, ground, simulator, emergency, or operational control training to confirm that:

- Appropriate training prescribed in the approved training program has been conducted as and when required
- Such records reflect each individual's attendance, participation, aptitude, or performance
- Adequate and accurate records are being maintained and retained in accordance with applicable regulations

The following terminology is used in this section:

- a *file* refers to a collection of records of training events for a specific employee which is maintained in a folder, binder, or computer database.
- a record refers to an individual record of a training or qualification event which is completed by the instructor or examiner and placed in an employees file.
- Flight operations personnel refers to pilots, flight engineers, flight operations officers (dispatchers), and flight attendants

An operator must develop forms and maintain records which are sufficient to establish the qualification and currency of each flight operations person for the position that he or she occupies at the time the inspection is conducted. By reviewing training records, the inspector should be able to establish a chronology of training and qualification events which render an individual fully qualified to perform the duties to which he is presently assigned, in accordance with DGAC regulations and the operator's approved training manual. Each record of a training event in an individual's file should contain the following information as a minimum:

- Specific type of training or qualification conducted the terminology employed should reflect that contained in the operator's approved training program, (e.g. "A-330 Pilot Recurrent Ground Training")
- Date(s) on which training was conducted
- Employee's name
- Employee's position
- Results of training or qualification complete or incomplete, satisfactory or unsatisfactory, etc.
- Instructor or examiner's name and signature

2. TRAINING AND QUALIFICATION REQUIREMENTS. ICAO minimum standards require the following types of training and qualification to be conducted:

- A. Flight Crew Members. ICAO Annex 6, Part 1, Section 9.3 specifies the following minimum training and qualification requirements for flight crew members:
 - Ground and flight training in the type(s) of airplane(s) on which the flight crew member serves, including emergency and abnormal situations.
 - Training on dangerous goods or hazardous materials.
 - Recurrent training covering the above areas. Recurrent flight training may be accomplished in a simulator or by a proficiency check
 - Recency of experience
 - Route and airport qualifications for PIC's.
 - Pilot Proficiency Checks

ICAO Annex 1 requires flight crew members to:

- Be medically qualified and have appropriate endorsements.
- Be properly licensed and to have passed Airplane Class and Type Rating examinations when appropriate.
- B. Flight Operations Officers. ICAO Annex 1 requires flight operations officers to be properly licensed. ICAO Annex 6 Chapter 10 recommends that they receive training in the following areas:
 - The operators operations manual(s)
 - Radio, navigation systems, and loading instructions for airplanes which the operator uses
 - all other features of the operation which are pertinent to his duties
 - Annex 6, Chapter 13 further recommends that flight operations officers complete qualification flights every twelve months, should be retrained in their assigned duties if absent for more than twelve consecutive months, and demonstrate their competency to perform their assigned duties.
- C. Flight (Cabin) Attendants. ICAO Annex 6, Chapter 12 specifies that Cabin Attendants who are assigned emergency functions receive training in the following areas:
 - Duties and functions to be performed during inflight emergencies and emergency evacuations
 - Emergency and life saving equipment such as life jackets, life rafts, evacuation slides, fire extinguishers, oxygen equipment, and first aid kits
 - Pressurization and oxygen requirements when operating above 10.000 feet
 - Other crew member's assignments
 - Dangerous goods

3. SPECIFIC INSPECTION AREAS.

Records should be examined to determine the following:

 Adequacy. The record-keeping forms which the operator uses are adequate for recording essential information which is required by the DGAC.

- **Practicality**. The forms are easy to fill out and to understand.
- Accessibility and Security. Records are easily accessible to the operator's staff who are required to use them, and secure from tampering by unauthorized individuals.
- Accuracy. Details of individual training events are properly recorded by instructors and examiners.
- Currency. Individual files have been expeditiously updated following completion of a training or qualification event.
- Conformity. Employees are properly licensed and rated, have received all required training and checks, and are fully qualified to be used in their specific crewmember or operations control positions

Of the above areas to be examined, *conformity* is by far the most time consuming. Specific training events and qualifications which must be documented in a crewmember's file will vary according to CASR requirements, the specific position in which the crewmember is utilized, the type of operation in which he is employed (extended range, charter, etc.), and the specific requirements of the operator's approved training program. Before commencing a training records inspection, the inspector should become thoroughly familiar with the operator's approved training program and understand how ICAO and CASR requirements are met by the various training courses and checking requirements set forth by the operator.

To avoid confusion, it is recommended that inspectors develop individual checklists of requirements which are specific to the operator and position being examined. For example, after becoming familiar with the training requirements which have been approved for an operator of B-737-400, the inspector may wish to develop checklists which list specific qualifications and training requirements which he would expect to find documented for B-737-400 captains. This checklist might include such courses as company indoctrination, initial ground and flight training as a first officer on the B-747-400, upgrade flight and ground training to the captain position on the BAE-146, and transition training to the captain position on the B-737-400. He would also expect to find a record of the captain's license, medical qualification, most recent base or proficiency check, together with route qualifications, area navigation training, security, hazardous materials, etc. etc.. A similar checklist for a BAE-142 First Officer would be considerably abbreviated.

It should not be necessary for an operator to maintain records of recurrent qualifications which are dated beyond a time when it can be established through cross checking other records that an individual was utilized in a specific capacity on a specific date. For example, it would be superfluous to

require and operator to maintain recurrent qualification records for a PIC during the entire course of his employment if the operator is not required to keep operations and flight records beyond six months.

4. INSPECTION PROCEDURES.

Specific training courses which meet the requirements listed in paragraph 8.2 above may vary widely between operators. The *Air Operator Training Records Inspection Checklist/Report* which appears at the end of this section contains the areas listed in paragraph 8.3 above, and will be used for all such inspections. Inspectors should clearly identify on the form the types of training and/or qualification records which were examined (e.g. "Flight Attendant", " B-737-400 PIC", etc.).



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AIR OPERATOR TRAINING PROGRAM INSPECTION CHECKLIST/REPORT

| Operator | Date | Location | | |
|---------------------------|------------------------------|---------------------------------------|--|--|
| Type of Records Inspected | | | | |
| | | | | |
| S=Sat | isfactory; U=Unsatisfactory; | P=Potential; I=Information; E=Exceeds | | |
| 1 ADEQUACY. Comme | ents: | | | |
| | | | | |
| | | | | |
| | | | | |
| 2 PRACTICALITY. Com | nments: | | | |
| | | | | |
| | | | | |
| | | | | |
| 3 ACCESSIBILITY and | SECURITY. Comments: | | | |
| _ | | | | |
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| 4. ACCURACY. Comme | ents: | | | |
| 4. <u> </u> | | | | |
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| | | | | |
| 5 CURRENCY. Comme | nts: | | | |
| <u> </u> | 1110. | | | |
| | | | | |
| | | | | |
| 6 CONFORMITY. Comr | ments: | | | |
| 5 55141 51\mil 11. 651111 | nonta. | | | |
| | | | | |
| | | | | |
| | | | | |
| OVERALL RESULT: | Satisfactory | INSPECTOR=S NAME AND SIGNATURE | | |
| | Unsatisfactory | | | |
| DAC FORM 8400-8 (05-01) | | Page 1 of 1 | | |

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CHAPTER 9 EN ROUTE COCKPIT INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

The primary objective of cockpit en route inspections is for an inspector to observe and evaluate the inflight operations of a certificate holder within the total operational environment of the air transportation system. En route inspections are one of the most effective methods of accomplishing air transportation surveillance objectives and responsibilities. These inspections provide the DGAC with an opportunity to assess the following elements of the aviation system that are both internal and external to an operator:

- A. Elements of the aviation system which are *internal* to the operator and can be observed during cockpit en route inspections include:
 - Crewmembers
 - Operator manuals and checklists
 - Use of MEL's and CDL's
 - Operational control functions (dispatch, flight-following, flight-locating)
 - Use of checklists, approved procedures, and safe operating practices
 - Crew coordination/cockpit resource management
 - Cabin safety
 - Aircraft condition and servicing
 - Training program effectiveness
- B. Elements of the aviation system which are *external* to the operator and can be observed during en route inspections include:
 - Airport surface areas
 - Ramp/gate activities
 - Airport condition and construction
 - Aircraft and vehicle movements
 - ATC and airway facilities
 - ATC and airspace procedures
 - Instrument Approach Procedures (IAP's), SID's, and STAR's
 - Navigational aids
 - Communications

2. GENERAL COCKPIT EN ROUTE INSPECTION PRACTICES AND PROCEDURES.

A. Before conducting en route inspections, it is important that inspectors become familiar with the operating procedures and facilities used by the operator. Inspectors can obtain such information by reviewing pertinent

sections of the operator's manuals, by obtaining briefings from other inspectors who are acquainted with the operator's procedures and facilities, or through training and briefing by the operator. The inspector is encouraged to comment in the inspection report on any procedure believed to be deficient or unsafe. it is also recommended that he debrief the flight crew at the conclusion of the flight regarding any deficiencies which he intends to note in the inspection report. The inspector must use good judgment, however, when debriefing crewmembers about procedures that may be specifically approved for that operator.

- B. Each operator should have established procedures to be used by inspectors for scheduling the cockpit observer's seat (jumpseat). DGAC regulations and policy and the operator's procedures must allow inspectors to have free, uninterrupted access to the jumpseat. Inspectors should make jumpseat arrangements as far in advance as possible. However. Since inspectors may have sudden changes in schedule and may not always be able to provide the appropriate advance notice, operator's procedures should be flexible so as to permit use of an available jumpseat on short notice.
- C. Whenever possible, inspectors should plan cockpit en route inspections in a manner that will avoid disruption of operator-scheduled check flights. Should an inspector arrive for a flight and find a line check or other type of check in progress, He must determine whether or not it is essential that the cockpit en route inspection be conducted on that flight. essential, the operator should be so advised and should make the jumpseat available to the inspector. If the cockpit en route inspection can be rescheduled and the objectives of the inspection can still be met, the inspector should make arrangements to conduct the inspection on another flight. When a required check ride is being conducted by a company check pilot the forward jumpseat and the en route inspection is essential. the inspector should occupy the second jumpseat, if one exists. When it is essential that the en route inspection be conducted on an aircraft that does not have two jumpseats, the company check pilot must occupy a pilot seat and the inspector should occupy the jumpseat. In such a case, the flight crewmember not being checked must either be seated in the cabin or not accompany the flight.
- D. An inspector should begin a cockpit en route inspection a reasonable amount of time before the flight (approximately 1 hour) by reporting at the operations area or at the gate, according to established procedures. He should complete any necessary jumpseat paperwork for inclusion in the operator's passenger manifest and weight and balance documents. After the inspector introduces himself to the flightcrew, he should inform the PIC of his intention to conduct an en route inspection. The inspector should then request that the flightcrew present their airman certificates and medical certificates or endorsements to him for examination. It is desirable that the inspector review with the flight crew prior to boarding the aircraft such items as weather documents, NOTAMs, planned route of flight, dispatch or flight release documents, and information about the airworthiness of the aircraft.

E. Sometimes an inspector cannot meet and inform the PIC of the intention to conduct an en route inspection before boarding the aircraft. In such a case, as soon as possible after boarding the aircraft the inspector should introduce himself to the PIC, present his identification, and inform the flightcrew of his intention to conduct a cockpit inspection. In this situation a flight attendant will usually be at the main cabin entrance door. One of the flight attendant's primary duties should be to ensure that only authorized persons enter the aircraft such as ticketed passengers, caterers, and authorized company personnel. Therefore, an inspector should be prepared to present his identification and any applicable jumpseat paperwork to the flight attendant before entering the cockpit. When boarding the aircraft, an inspector should also avoid unnecessarily impeding passenger flow or interrupting flight attendants during the performance of their duties. Also, during this time an inspector may have ample opportunity to observe and evaluate the operator's carry-on baggage procedures and the gate agent's or flight attendant's actions concerning oversized items. Once inside the cockpit, the inspector should request an inspection of each flight crewmember's airman and medical certificates when convenient. He should review the maintenance logbook to determine the airworthiness of the aircraft, and request that the flightcrew provide him with the trip documents for his review when it does not interfere with their duties.

F. The inspector must wear a headset during the flight. During cockpit en route inspections, inspectors must try to avoid diverting the attention of flight crewmembers performing their duties during "critical phases of flight." Inspectors must be alert and point out to the flightcrew any apparent hazards such as conflicting traffic. If during an en route inspection, an inspector becomes aware that the flightcrew is violating a regulation, company policy, or an ATC clearance, the inspector should immediately inform the PIC of the situation.

3. SPECIFIC EN ROUTE COCKPIT INSPECTION PROCEDURES.

Once situated in the cockpit, the inspector should check the jumpseat oxygen and emergency equipment (if applicable) and connect the headset to the appropriate interphone system. The PIC or a designated crewmember should offer to give the inspector a safety briefing. If the PIC does not make such an offer, the inspector should request a briefing. It is important that the inspector monitor all radio frequencies being used by the flightcrew to properly evaluate ATC procedures, flightcrew compliance, transmission clarity, and radio phraseology. The monitoring of these frequencies also ensures that the inspector does not inadvertently interfere with any flightcrew communications. Inspectors should continuously monitor these frequencies to remain aware of the progress of the flight.

Inspectors should consider all inspection areas, both internal and external to the operator, to be of equal importance. The inspection is divided into four categories as follows:

Crewmembers

- Flight Conduct
- Airport
- ATC/Airspace

The Air Operator En route Inspection Checklist/Report form which appears at the end of this chapter will used to conduct en route inspections. This form follows the format of the discussion which follows:

A. Crewmembers. This inspection area applies primarily to flight crewmembers, but cabin crewmembers may also be observed in certain areas such as coordination with the cockpit. Inspectors should evaluate such items as flight crewmember knowledge, ability, and proficiency by directly observing crewmembers performing their respective duties and functions. The checklist/report form contains a list of reminder items which should be observed in the crewmember inspection area. These items are not all-inclusive but represent the types of items which are common to several phases of flight and which inspectors should evaluate during a typical cockpit en route inspection.

Inspectors will have the opportunity to evaluate crewmembers in the following areas which are common to many or all phases of flight:

- (1) Licenses valid as follows:
 - Proper ratings and endorsements for the positions occupied
 - Medical certificate or endorsement appropriate and current
- (2) Knowledge demonstrated knowledge in the following specific areas:
 - AOM Specific aircraft limits, systems, equipment, procedures, and flight profiles
 - FOM or equivalent General company policy and procedures related to crew conduct and type of operation
 - DGAC regulations and ICAO International standards and recommended practices - appropriate to the type of operation conducted
 - Airway Manuals Interpretation and application of approach plates, STARS, SIDS, airport and line station information, communications, etc.
 - MEL/CDL Familiarization to the extent that specific items can be expeditiously located and information properly interpreted and applied.
 - Checklists cockpit flow and responses to challenges in normal checklists, knowledge of where to locate and an understanding of the philosophy behind abnormal and emergency procedures.
 - General body of aviation knowledge commensurate with level of airman certificate and experience: ATC, weather, aerodynamics, powerplants, radar interpretation, etc.

(3) *Proficiency* - skill in applying the above knowledge to specific phases of flight and in manipulating aircraft controls and systems at the assigned crewmember position

- (4) Situational awareness related to proficiency but refers to apparent or demonstrated awareness (particularly in critical phases of flight) of such factors as traffic flow, weather, position and configuration of airplane, airspeed, altitude, rate of descent, etc.
- (5) Conformity to provisions of AOM, FOM, other company bulletins and instructions, DGAC regulations, ICAO standards and practices, ATC practices and specific instructions, MEL/CDL, and airway manual. Attention should be given to:
 - Remaining at duty stations per regulatory guidance
 - Use of seatbelts and safety harnesses
 - Use of oxygen
 - Use of corrective lenses (glasses) when required by medical certificate
- (6) Manuals available, current, and adequate (information regarding latest changes can be obtained from the carrier prior to the inspection)
- (7) Coordination between cockpit crewmembers (cockpit resource management) and between cockpit and cabin crewmembers.
- (8) Use of checklists prompt and consistent use of required checklists during appropriate phase of flight
- (9) Required equipment flashlight, cockpit key, headset, and other such personal items which may be required by DGAC regulations or company policy.
- B. Flight Conduct. This inspection area is by far the largest and most complex. It relates to specific phases of flight which can be observed during an en route inspection. The checklist/report form contains a list of the items that should be evaluated by inspectors during these phases of flight. These items are not all-inclusive and in some cases (such as "powerback") may not be applicable to the flight conducted. Inspectors are, however, encouraged to observe, evaluate, and report on as many of these items as possible.

Some of the areas that should be observed and evaluated during each specific flight phase are as follows:

(1) Preflight: Inspectors should determine that the flightcrew has all the necessary flight information including the appropriate weather, dispatch, or flight-release information; flight plan; NOTAM's; and weight and balance information. MEL items should be resolved in accordance with the operator's MEL and appropriate maintenance procedures. Inspectors should observe the flightcrew performing

appropriate exterior and interior preflight duties in accordance with the operator's procedures.

- (2) Predeparture: Inspectors should observe the flightcrew accomplishing all predeparture checklists, takeoff performance calculations, and required ATC communications. If a Flight Management System (FMS) is installed, setup and data entry should be observed. If INS or Omega is installed, data entry and verification should be observed. Flight crew should verify fuel quantity indications against amount delivered and/or physically check tanks. The flightcrew should use coordinated communications (via hand signals or the aircraft interphone) with ground personnel. Crew should properly monitor engine starts. Often pushback or powerback clearance must be obtained from the appropriate ATC or ramp control facility.
- (3) Taxi: The following areas should be observed during taxi:
 - Adherence to taxi clearances
 - Control of taxi speed and direction
 - Observance of taxiway signs and markings
 - Cockpit setup and checklist
 - Conduct of a pre-takeoff briefing in accordance with the operator's procedures
 - Awareness of other ground movement (aircraft and vehicles)
 - Use of appropriate checklists

When weight and balance information is transmitted to the aircraft by company radio during the outbound taxi, the flightcrew should follow the operator's procedures as to which crewmember receives the information and completes the final takeoff performance calculations, and which crewmember monitors the ATC frequency.

- (4) *Takeoff:* The takeoff procedure should be accomplished as outlined in the operator's manual. Inspectors should observe and evaluate the following items or activities during the takeoff phase:
 - Aircraft centerline alignment
 - Application of power to all engines
 - Takeoff power settings
 - Use of crosswind control techniques
 - Flightcrew call-outs and coordination
 - Adherence to appropriate takeoff or V speeds
 - Rate and degree of initial rotation
 - Use of flight director, autopilot, and autothrottles (FMS if applicable)
 - Gear and flap retraction schedules and limiting airspeeds
 - Use of radar and weather avoidance if applicable

(5) Climb: The climb procedure should be conducted according to the operator's manual. Inspectors should observe and evaluate the following items and activities during the climb phase of flight:

- Compliance with the ATC departure clearance or with the appropriate published departure
- Adherence to proper climb profile
- Airspeed/Mach control
- Navigational tracking/heading control
- Powerplant control
- Use of radar and weather avoidance, if applicable
- Use of autoflight systems
- Pressurization procedures, if applicable
- Sterile cockpit procedures
- Cockpit vigilance and traffic awareness
- After-takeoff checklist
- (6) *Cruise:* Procedures used during cruise flight should conform to the operator's procedures. Inspectors should observe and evaluate the following areas during the cruise phase of flight:
 - Cruise mach/airspeed control
 - Navigational tracking/heading control
 - Use of radar, if applicable
 - Turbulent air procedures, if applicable
 - Monitoring flight plan (actual vs. planned fuel consumption and flight time)
 - Awareness of mach buffet and maximum performance ceilings
 - · Coordination with cabin crew
 - Compliance with oxygen requirements, if applicable
 - Vigilance proper visual lookout and crewmembers at stations except to attend to physiological needs.
 - Compliance with ATC clearances and instructions
- (7) Descent: Procedures used during descents should conform to the operator's procedures. Inspectors should observe and evaluate the following areas before and during the descent phase of flight:
 - Descent planning
 - Weather/ATIS check
 - Crossing restriction requirements
 - Navigational tracking/heading control
 - Use of radar, if applicable
 - Awareness of Vmo/Mmo speeds and other speed restrictions

- Compliance with ATC clearance and instructions
- Use of autoflight systems including FMS is applicable
- Pressurization control, if applicable
- Weather considerations
- Altimeter settings
- · Briefings, as appropriate
- Coordination with cabin crew
- Sterile cockpit procedures
- Vigilance
- Descent checklist
- (8) Approach: Procedures used during the selected approach (instrument or visual) should be accomplished according to the operator's manual. Inspectors should observe and evaluate the following areas during the approach phase of flight:
 - Approach checklists
 - · Approach briefings, as appropriate
 - Compliance with ATC clearances and instructions
 - Navigational tracking/heading and pitch control
 - Airspeed control, V_{ref} speeds
 - Flap and gear configuration schedule
 - Use of flight director, autopilot, autothrottles, and FMS if installed
 - Compliance with approach procedure
 - Stabilized approach in the full landing configuration
 - Sink rates
 - Flightcrew call-outs and coordination
 - Transition to visual segment, if applicable
- (9) Landing: Procedures used during the landing maneuver should conform to those outlined in the operator's maneuvers and procedures documents. Inspectors should observe and evaluate the following areas during the landing phase of flight:
 - Before-landing checklist
 - Powerplant control land engine spool-up considerations
 - Threshold crossing height (TCH)
 - Aircraft centerline alignment
 - Use of crosswind control techniques
 - Sink rates to touchdown
 - Powerplant control/engine spool-up considerations
 - Touchdown and rollout

- Thrust reversing and speedbrake procedures
- Use of autobrakes, if applicable
- Use of nosewheel steering
- Braking techniques
- Diverting attention inside the cockpit while still on the runway
- After-landing checklist
- (10) Arrival: Taxi, pre-arrival and parking procedures should conform to the operator's procedures as outlined in the appropriate manual. Inspectors should evaluate crew use of visual parking aids and/or parking directors, parking speed, and accomplishment of after-landing checklists, groundcrew parking, and passenger deplaning procedures.
- (11) Post-arrival: Inspectors should observe and evaluate the flightcrew complete postflight duties such as postflight checks, aircraft logbook entries, and flight trip paperwork completion and disposition.
- C. Airports. This inspection area pertains to the various elements of airports which may be observed during flights such as runways, taxiways, ramps, and aircraft ground movements. Inspectors should observe and evaluate as many of these elements as possible:
 - Condition of surface areas such as ramp and gate areas, runways, and taxiways (cracks, depressions, weeds, overgrowth, etc.)
 - Lighting of runways, taxiways, ramp, and other traffic areas
 - Taxiway signs, markers, sterile areas, and hold lines
 - Ramp vehicles, equipment, movement control
 - · Aircraft servicing, parking, and taxi operations
 - Obstructions, construction, and surface contaminants (such as ice, slush, snow, fuel spills, rubber deposits)
 - FOD
 - Snow control for international flights, if applicable
 - Security and public safety
 - Navaids, approach lighting, and communications
- D. ATC/Airspace. The "ATC/airspace" inspection area pertains to the various elements of Air Traffic Control and national or international airspace systems. These elements should be observed and evaluated by inspectors during en route inspections. From an operational standpoint, these evaluations are a valuable information source which can be used not only to enhance safety with respect to air traffic control and the airspace system, but also to enhance the effectiveness of en route and terminal facilities and procedures.

During cockpit en route inspections, inspectors have the opportunity to observe and evaluate ATC operations and airspace procedures from the

vantage point of the aircraft cockpit. Inspectors may observe and evaluate the following areas from the cockpit:

- Radio frequency congestion, overlap, or blackout areas
- Controller phraseology, clarity, and transmission rate
- ATIS validity, clarity, etc.
- Departure and approach instructions
- Clearance deliveries for responsiveness and acceptable, safe clearances
- Aircraft separation standards
- Controller situational awareness traffic flow, conflicts, aircraft flight characteristics, priorities, etc.

Although these four general inspection areas cover a wide range of items, they are not the only areas that can be observed and evaluated during cockpit en route inspections. Inspectors may have the opportunity to evaluate many other areas, such as line station operations and flight control procedures. Such functions can often be observed before a flight begins, at en route stops, or at the termination of a flight. Inspectors should include any remarks regarding such areas in the comments section of the checklist.



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AIR OPERATOR COCKPIT EN ROUTE INSPECTION CHECKLIST/REPORT

| Operator | Fligh | t No. | Date | Fr | om | To | 0 | Type Airc | raft | Reg. Mark. |
|----------|----------|-------|-----------|----|----------|----|------------|-----------|------------|---------------|
| Captain | Lic. No. | Firs | t Officer | | Lic. No. | | Other Flig | ght Crew | Senior Cab | oin Attendant |

S=Satisfactory; U=Unsatisfactory; P=Potential; I=Information; E=Exceeds; N=Not Observed

| A. CREWMEMBERS | 4 | Takeoff | ! Sterile Cockpit |
|--------------------------------------|---|-----------------------------------|--------------------------------------|
| | | ! Alignment | ! Checklist |
| 1 Licenses | | ! Power Application | ! Vigilance |
| 2 Knowledge | | Power Setting | 8 Approach |
| ! AOM | | ! Crosswind Control | ! Briefing |
| ! FOM | | ! Callouts/Coordination | ! ATC Compliance |
| ! Civil Aviation Regulations | | ! V Speeds | . Navigation |
| ! Airway Manual | | ! Rotation | ! Airspeed/V _{ref} Control |
| ! MEL/CDL | | ! FD/AP/AT/FMS | ! Gear and Flap Extension |
| ! Checklists | | ! Gear/Flap Retraction | ! FD/AP/AT/FMS |
| ! General | | ! Radar/Weather Avoidance | ! Approach Procedure |
| 3 Proficiency | 5 | | ! Sinkrates |
| 4 Situational Awareness | • | ! ATC Compliance | ! Stabilized Approach |
| 5. Conformity | | ! Climb Profile | ! Callouts/Coordination |
| 6 Manuals | | ! Airspeed/Mach Control | ! Transition to Landing |
| 7 Coordination | | ! Navigation | |
| 8 Use of Checklists | | ! Navigation ! Powerplant Control | 9 Landing ! Before-landing Checklist |
| Required Equipment | | • | |
| | | ! Radar/Weather Avoidance | ! TCH |
| B. FLIGHT CONDUCT | | ! FD/AP/AT/FMS | ! Centerline Alignment |
| | | ! Pressurization Procedures | ! Crosswind Control |
| 1 Preflight | | ! Sterile Cockpit | ! Sinkrates |
| ! Flight Plan | | ! Vigilance | ! Power Control |
| ! Dispatch Release | 6 | | ! Touchdown and Rollout |
| ! Weather | | ! Mach/Airspeed Control | ! Speedbrake/Thrust |
| ! Notams | | ! Navigational Tracking/ | Reverse |
| ! Load Information | | Heading Control | ! Braking |
| ! MEL Items | | ! Radar | ! Nosewheel Steering |
| ! Exterior and Interior | | ! Turbulence Procedures | ! Vigilance |
| Aircraft Inspection | | ! Flight Plan/Fuel Monitoring | 10 Arrival |
| 2 Predeparture | | ! Performance Awareness | ! Taxi |
| ! Checklists | | ! Coordination with Cabin | ! Parking |
| ! Performance Calculations | | ! O ₂ Use | ! Groundcrew Coordination |
| ! ATC Communications | | ! Vigilance | 11 Post-Arrival |
| ! Groundcrew Coordination | | ! ATC Compliance | ! Postflight Checks |
| ! Pushback | 7 | | ! Logbooks/Paperwork |
| ! Engine Start | | ! Planning | |
| ! Use of FMS if installed | | ! Crossing Restrictions | C. AIRPORTS |
| 3 Taxi | | ! Navigational Tracking/ | |
| ! Adherence to Clearances | | Heading Control | 1 Surface Condition |
| ! Speed/Directional Control | | ! Radar | 2 Lighting |
| ! Observance of Taxiway | | ! Speed Awareness | 3 Signs/Markings |
| Signs and Markings | | ! ATC Compliance | 4 Ramp Vehicle Control |
| ! Cockpit Setup/Checklist | | ! FD/AP/AT/FMS | 5 Aircraft Movement |
| ! Pre-takeoff Briefing | | ! Pressurization Control | 6 Obstructions/Construction/ |
| ! Awareness/Vigilance | | ! Altimeter Settings | Contaminants |
| : Awareness/ vigilance | | . Addition detailings | 7 FOD |

| | ! Briefings | | v Control |
|--|--|-------------------------------------|--|
| DAC FORM 8400-9 (06-01) | ! Coordination wit | n Cabin | Page 1 of 2 |
| C. AIRPORTS (Continued) 9 Security and Public Safety 10 Navaids/Approach Lighting and Communications D. AIR TRAFFIC CONTROL | 2 Controller Commun ! Phraseology ! Clarity ! Transmission Rat 3 ATIS ! Clarity ! Currency | ! Res ! Acc e Cle 8 Aircra | ance Deliveries sponsiveness eptable and Safe earances aft Separation roller Situational |
| 1 Radio Frequencies ! Congestion ! Overlap ! Blackout Areas | 5 Departure and App Instructions | | eness |
| REMARKS: | | | |
| | | | |
| OVERALL RESULT: Satis | sfactory | INSPECTOR=S NAME | E AND SIGNATURE |
| | atisfactory | | |

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CHAPTER 10 ENROUTE CABIN INSPECTIONS

1. OBJECTIVE OF CABIN EN ROUTE INSPECTIONS.

Cabin (en route) inspections are conducted to assess the level of cabin safety in air transportation by the direct observation and evaluation of operations conducted in the aircraft cabin. Cabin inspections provide the DGAC with information concerning flight attendant training programs, operator procedures, and the condition and maintenance of aircraft emergency equipment and furnishings. Cabin inspections, together with cockpit en route inspections, provide the DGAC with a comprehensive assessment of safety in air transportation operations.

2. MANAGEMENT OF CABIN EN ROUTE SURVEILLANCE.

- A. Frequency of Cabin Inspections. An adequate number of cabin en route inspections will be conducted each year on the operators for which the CAA is responsible. The ICAO Manual of Procedures for Operations Certification and Inspection recommends that enroute inspections, including cabin enroute inspections, be conducted at least once each quarter for each operator. In accordance with Chapter 1 of this volume, four cabin inspections will be conducted annually for each aircraft type which the airline operates.
- B. Procedures Training for Inspectors. An operator's procedures are to be designed to have cabin en route operations conducted in accordance with government regulations and with standard operating practices. A wide variation may exist, however, in the manner in which different operators meet these requirements. It is difficult for an inspector when observing a cabin crew, to determine if the crew is carrying out their duties in the prescribed manner unless the inspector is knowledgeable in the operator's procedures. Whenever possible, the DGAC will arrange for its flight operations inspectors to attend the cabin procedures training of the operators for which they have surveillance responsibilities. The DGAC will request the assistance of the operator in conducting such training.

3. CABIN INSPECTION AREAS.

Areas which should be covered during cabin inspections may be grouped into three broad categories as follows:

- A. *Aircraft*. The "aircraft" inspection area applies to the general airworthiness of the aircraft and the condition and availability of aircraft cabin emergency equipment and furnishings.
- B. Crewmember. The "crewmember" inspection area applies to flight attendants who perform duties during a cabin inspection. Inspectors should evaluate such items as crewmember knowledge, ability, and proficiency by directly observing flight attendants performing their respective duties and functions.

C. Flight Conduct. The "flight conduct" inspection area refers to items which relate to a particular phase of the flight such as stowage of girt bars, passenger briefings, turbulent air security, and stowage of carry-on luggage.

Although these three general inspection areas cover a wide range of items to be inspected during cabin en route inspections, they are not the only areas that can be observed and evaluated by inspectors. Inspectors may have the opportunity to evaluate many other areas such as line station operations and aircraft servicing. These types of areas can often be observed before beginning a flight, at en route stops, or at the termination of a flight.

4. GENERAL CABIN EN ROUTE INSPECTION PRACTICES AND PROCEDURES.

- A. Inspectors should make prior arrangements with the operator, in accordance with established procedures, for occupying cabin seats on revenue flights. Inspectors should board the aircraft before passengers are boarded to allow adequate time to inspect the aircraft's emergency equipment, furnishings, flight attendant manuals, and to discuss duties, responsibilities, and normal and emergency procedures with cabin crewmembers. Inspectors should first introduce themselves to both the captain and lead flight attendant and then inform them that an inspection is being conducted.
- B. When the flight has ended, the inspector should thoroughly debrief the lead flight attendant, other applicable flight attendants, and if possible, the captain, of all pertinent observations and of any deficiencies noted during the inspection. If the inspector believes that he has discovered deviations from provisions of the CASR and other DGAC policy, he should inform the crew of his finding.
- C. An inspector should make an effort to be cordial and non-confrontational with the crewmembers he is evaluating. Crewmembers should initially be briefed to continue their assigned duties as if the inspector was not present. The inspector should then request that a crewmember provide a manual and be available for a brief conversation about the crewmember's duties at a time that is convenient and chosen by that crewmember.
- D. Inspectors should avoid interfering with the crewmember's assigned duties. They should consider that flight attendants are particularly busy during passenger loading, and should avoid distracting crewmembers during this time. They can, however, make useful observations, such as evaluating the gate agent's or flight attendant's actions concerning carryon baggage and oversized items.
- E. Some operators require flight attendants to accomplish a preflight inspection of at least some of the emergency and safety equipment in the cabin. In such a case, the inspector should observe the flight attendant inspect the equipment and then follow up by inspecting a few pieces of the equipment himself. An inspector can determine whether the operator requires a flight attendant to conduct preflight by referring to the flight attendant manual. When a flight attendant preflight equipment inspection

is not required by the operator, the inspector should inspect the equipment. If there is not enough time to inspect the emergency equipment before the flight, the inspector may choose to inspect it after the flight. Some emergency equipment may be inspected during the cruise portion of the flight, but the inspector should exercise care and discretion when doing so. Passengers should not be disturbed or alarmed. The inspector should refrain from examining such items as exits, slide pressure gauges, fire extinguishers, or portable oxygen bottles in view of passengers while in flight.

5. SPECIFIC CABIN EN ROUTE INSPECTION PRACTICES AND PROCEDURES.

A cabin enroute inspection is divided into the following areas:

- A. Aircraft. The aircraft emergency equipment and furnishings should preferably be inspected before passenger boarding. Some specific items or activities that may be evaluated in the "aircraft" inspection area are as follows:
 - Cabin Logbooks, or Equivalent (for open discrepancies, carry-over items, and items of cabin equipment needing repair or replacement)
 - Required Placards and Signs (exit signs; seat belt/no smoking signs; emergency/safety equipment placards; seatbelt/flotation equipment placards at seats; weight restriction placards; no-smoking placards; door-opening instruction placards; etc.)
 - Fire Extinguishers (for correct type, number, and location; if properly serviced, tagged, and stowed)
 - Portable Oxygen Bottles (for correct number and location; if properly serviced, tagged, and stowed; for condition of mask, tubing, and connectors)
 - Protective Breathing Equipment (if installed) for correct location, properly stowed and sealed
 - First Aid Kits and Emergency Medical Kits (for correct number and location; if properly tagged and stowed)
 - Megaphones (for correct number and location; if operable and properly stowed)
 - Passenger Briefing Cards (if at each passenger seat position; if appropriate to aircraft; if they contain the necessary information including emergency exit location and operation, slides, oxygen use, seatbelt use, brace positions, flotation devices; appropriate pictorials for extended overwater operations including ditching exits, life preservers, and liferaft or slideraft inflight location)
 - Passenger Seats (if not blocking emergency exits; if seat cushions are intact; for latching mechanism on tray tables; if self-contained and removable ashtrays; if seatbelts are operational - not frayed or twisted; presence and condition of life preservers if required)
 - Passenger Oxygen Service Units (if closed and latched without any extended red service indicators or pins)

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Flight Attendant Station (for seat retraction/restraint system operation if retracts and is properly secured; if seatbelts are not frayed or twisted;
seat cushions intact; for correct position of headrest; if PA system and
interphone are operable; for aircraft-installed flashlight holders)

- Galleys (for latching mechanisms (primary and secondary); tie-downs; condition of restraints; padding; proper fit of cover and lining of trash receptacles; hot liquid restraint systems; accessibility and identification of circuit breakers and water shut-off valves; non-skid floor; debris or corrosion of girt bar; "clean" stationary cart tie-downs (mushrooms); if galley carts in good condition and properly stowed; lower lobe galley (if applicable) emergency cabin floor exits should be passable and not covered by carpeting)
- Galley Personnel Lift (if applicable) (should not move up or down with doors open; for safety interlock system; for proper operation of activation switches)
- Lavatories (for smoke alarm, no-smoking placards, ashtrays; for proper fit of cover and lining of trash receptacles; for automatic fire extinguisher system)
- Stowage Compartments (for weight restriction placards; for restraints and secondary latching mechanisms; for compliance with stowage requirements; for accessibility to emergency equipment; for carry-on baggage provision)
- Crew Baggage (if properly stowed)
- Emergency Lighting System (for independence from main system; if operable; for floor proximity escape path system)
- Exits (for general condition; door seals; girt bar and brackets; handle mechanisms; signs and placards; slide or slideraft connections and pressure indications; lights)
- B. Crewmembers. The inspector should determine if the required number of flight attendants are aboard. When evaluating flight attendant knowledge and competency, inspectors should ask clear and concise questions that are related primarily to the use of emergency equipment and operational duties and responsibilities. At least one flight attendant manual should be reviewed for currency and for determining the manual's accessibility when flight attendants are performing assigned duties. If time permits (for example during a meal service), the inspector should review the manual for items such as the location of aircraft emergency equipment, emergency and non-normal procedures, communications with the cockpit, and required briefing and PA announcements. To evaluate cabin crewmember knowledge and level of competency, inspectors should ask the flight attendants a limited number of questions, including asking for an explanation of safety procedures from the operator's manual. attendants are not normally required to know the contents of DGAC regulatory guidance. The operator's procedures should be designed so that when a flight attendant complies with the company manual the flight attendant is also in compliance with the regulations. Inspectors and should make a careful distinction between inadequate knowledge on the

part of the crewmember and a deficient company procedure. Inadequate knowledge may reflect a deficiency in training.

Some appropriate areas that inspectors may ask flight attendants to explain are as follows:

- The term "captain's authority" and crew coordination procedures in case of an emergency
- How to remove a fire extinguisher or portable oxygen bottle, its method
 of operation, how to determine its maintenance and inspection status,
 and how to stow the extinguisher or oxygen bottle correctly into its
 restraint mechanism
- The company procedure for dealing with lavatory or galley fires
- Which type of fire extinguisher should be used on galley (grease/electrical) fires, cabin furnishings fires (seats or floor), lavatory or galley waste container fires (paper or plastic)
- The procedures for documenting (in aircraft or cabin logbooks, when available) the need for items of cabin equipment to be repaired, adjusted, or replaced
- How to manually deploy a passenger service unit, including how to ensure adequate oxygen flow
- Normal and emergency procedures for communications with the cockpit
- Normal and emergency procedures for opening/deploying exit doors and slides or sliderafts, including how to deal with adverse conditions such as wind, fire, or a "tilted" aircraft (for example, in a collapsed landing gear situation)
- The location of company-required personnel equipment such as operational flashlight (could be installed in the aircraft), appropriate sections of the flight attendant manual, a cockpit key
- The signs of decompression, including mask dropping, a decrease in temperature, noise, and physiological symptoms
- The company procedure for flight attendants to follow in the event of a rapid depressurization (recommended procedure is to immediately don the nearest mask, sit down and fasten seatbelt or, hold on to something solid and wait for instructions from the cockpit)
- The "brace for impact" position and the appropriate cockpit signal to assume the position
- The procedures to be followed during operations in turbulent air, including securing galley service carts, keeping passengers seated, cockpit coordination, and galley security
- The procedures to be followed in the event of unruly, abusive, or threatening passengers
- Sterile cockpit procedures

 What to do if the aircraft is descending for landing and a flight attendant is unable to stow a galley cart (notify the cockpit; PIC shall make decision to land or go-around)

- If a flight is conducted as an extended-overwater flight, the procedures for donning of life vests and cabin preparation before a water landing
- The procedures to be followed during a hijacking, bomb threat, or other potential security problem including the company's specific procedures for notifying the cockpit
- C. Flight Conduct. Inspectors should evaluate the cabin crew during each pertinent phase of flight. This evaluation should include noting the flight attendant's adherence to the procedures outlined in the flight attendant manual as well as adherence to regulations and safe operating practices. The evaluation of the various phases of flight will be accomplished as follows:
 - (1) Predeparture: An inspector should observe flight attendants accomplishing tasks such as supervising the boarding of passengers and properly stowing carry-on baggage. The passenger-loading door should not be closed until a required crewmember verifies that each piece of carry-on luggage is properly stowed. Items that cannot be stowed should be processed as checked baggage. Additionally, carry-on baggage should not cover, or in any way interfere with, aircraft emergency equipment in the overhead compartments.

The departure briefing may be given any time before takeoff, provided the flight attendants have sufficient time to take their assigned positions and to secure their restraint systems. The quality, clarity, and volume level of the PA system should be evaluated by the inspector during the briefing. Passenger briefings should contain the following areas of information:

- Smoking: Company policy (in conformance with government regulations). No smoking when the no-smoking signs are illuminated; requirement for passenger compliance with lighted signs and posted placards; prohibited in lavatories including a statement regarding prohibition against tampering with, disabling, or destroying any smoke detector in an airplane lavatory (if installed)
- Exit Locations: The preferred method is to physically point out exits in a meaningful way
- Seatbelt Use: Including instructions on how to fasten and unfasten seatbelts
- Flotation Devices: Including the location and use of the means of flotation
- Tray Tables and Seatbacks: Position for takeoff and landing
- Baggage: How to be properly stowed for takeoff and landing
- Oxygen Use: Should point out the location of and demonstrate the use of the oxygen mask

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 Extended Overwater Operations: Including the location, donning, and use of life preservers, liferafts (or sliderafts) and other means of flotation

 Special Passenger Briefings (if applicable): For persons who are handicapped or warrant some other special kind of attention, and for the individuals assisting them

If someone requires the assistance of another person in an emergency evacuation, both persons should be briefed by a flight attendant on the location and path to the exits and on the most appropriate manner for assisting the person so as to prevent pain or injury. Inspectors should refer to the flight attendant manual for company policy and procedures for the handling of handicapped persons.

- (2) Taxi and Takeoff: During taxi operations and before takeoff, flight attendants should perform only those duties that are safety-related and that require movement around the cabin. A list of those items or activities which should be evaluated during taxi and takeoff is as follows:
 - Each exit is closed and locked with the girt bars properly attached (if applicable)
 - All stowage compartments are properly secured and latched closed
 - The galley is secured with no loose items; all serving carts are properly restrained in the proper floor attachment points; the cockpit door is closed or open in accordance with the operator's manual
 - Passenger seatbelts and shoulder harnesses, if installed, are secured
 - That operators have procedures for ensuring passengers are seated before the aircraft is moved
 - During the actual takeoff, each flight attendant is seated with restraint systems properly fastened; any unoccupied flight attendant seat is properly secured for takeoff; signal from cockpit to flight attendants is properly given
 - After takeoff, and either before or immediately after the seatbelt illumination is shut off, it is recommended that an announcement is made that passengers should keep their seatbelts fastened, even when the seatbelt sign is turned off
 - If the flight is to be a smoking flight, when the no-smoking sign is turned off, an announcement is made that smoking is permitted in certain rows and prohibited in the aisles and lavatories
- (3) En Route/Cruise Procedures: During the en route phase of flight, several areas may be evaluated by the inspector to note whether they conform to regulations and to safe operating practices:

 Signs (monitoring of seatbelt and no-smoking signs to ensure passenger compliance)

- Crew Coordination (for flightcrew and cabin crewmember communications - routine and/or emergency)
- Turbulent Air Procedures (including the proper restraint of serving carts, galley furnishings and equipment, passenger seatbelts fastened, and instructions from the cockpit being followed)
- Passenger Handling (including not serving alcoholic beverages to intoxicated passengers; handling abusive or disruptive passengers; handling handicapped or ill passengers; and handling those passengers who for other reasons require special attention)
- (4) Approach and Landing: During the approach and landing phases of flight, flight attendants should prepare the cabin for arrival by performing at least the following actions:
 - Ensuring carry-on baggage is stowed and all seat backs and tray tables are upright and stowed respectively
 - Removing all food, beverages, or tableware from each passenger seat location
 - Observing "sterile cockpit" procedures
 - Ensuring that passenger seatbelts are fastened
 - Being seated before landing at assigned duty positions, with appropriate restraint systems fastened, for a uniform distribution among the floor level exits to provide the most effective egress of passengers in the event of an emergency evacuation
- (5) Landing/Arrival: After landing, the cabin crew should prepare the aircraft for arrival by performing duties such as the following:
 - Before the captain has turned off the seatbelt sign, observing operator procedures for ensuring passengers remain in their seats with seatbelts fastened
 - Upon arrival at the gate and after the seatbelt sign has been turned off, preparing the exits for deplaning
 - Ensuring the appropriate complement of flight attendants remain onboard the aircraft at en route stops (when passengers remain onboard the aircraft to proceed to another destination)

6. REPORTING PROCEDURES.

The Air Operator Cabin Inspection Checklist/Report form included at the end of this chapter contains a list of reminder items for the specific inspection areas which should be observed and evaluated. This form follows the format of the preceding discussion in this chapter. It is necessarily general in nature and intended to cover all aircraft types and conditions of flight, thus, every item may not apply to a particular flight.



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AIR OPERATOR CABIN INSPECTION CHECKLIST/REPORT

| Operator | | Flight No. | Date | From | | То |
|---------------|------------|------------|------|-----------|---------|--------|
| Type Aircraft | Reg. Mark. | Captain | | Senior Ca | bin Att | endant |

S=Satisfactory; U=Unsatisfactory; N=Not Observed

| A. AIRCRAFT EQUIPMENT | 12Lavatories | 5Personal Equipment |
|---|---|---|
| l | Signs/Lights | Cockpit Key and |
| 1 Required Signs and | Smoke Alarms | Flashlight |
| Placards | Trash Containers | 6Manual |
| 2 Logbooks | Extinguishers | Available |
| Open items | 13Stowage Areas | Current |
| Carryover items | Latch Mechanisms | |
| Cabin Items | Access to Equipment | C. FLIGHT CONDUCT |
| 3 Fire Extinguishers | 14Emergency Lighting | 1Predeparture |
| Correct Type | Tested/Operable | PAX Boarding |
| Number | Floor/Escape Path | Carry-on Baggage |
| Location | 15Exits | 5434.6 |
| Serviced | Controls/Seals | |
| 4 Megaphones | Girt Bar and Brackets | Door Arming Door Arming |
| Number | Signs/Symbols | Report to Cockpit Dradenartura Briefings |
| Location | Rafts/Lanyards | 2. Predeparture Briefings |
| Tested | | Smoking First Locations |
| 5 Portable O ₂ Bottles | B. FLIGHT ATTENDANTS | Exit Locations |
| Number | | Seatbelt Use Flatation Basican |
| Service | 1Crew Compliment | Flotation Devices |
| Location | Initial Boarding | Stowage of Baggage |
| Condition Mask/Hoses | En Route Stops | Use of Oxygen |
| 6. PBE | 2Coordination with Cockpit | Special PAX |
| Properly Stowed | · · | 3Taxi/Takeoff |
| Sealed | 3Knowledge | Cabin Secured |
| 7 PAX Briefing Cards | PIC Authority | FA Position |
| At Each Seat | Cabin Fires | Takeoff Signal |
| Required Information | Cabin Logbook | Announcement |
| 8 PAX Seats | • PSU | 4Cruise |
| Emergency Exits | Emergency | Monitor Signs |
| Condition | Communications with | Crew Coordination |
| Ash Trays | Cockpit | Passenger Handling |
| Seatbelts/Tray Tables | Location and Use of | Turbulent Air Procedures |
| Life Preservers | Emergency Equipment | 5Approach/Landing/Arrival |
| 9 PAX O ₂ Service Units | Decompression | Announcements |
| Operational | Turbulent Air | Cabin Secured |
| Service Pins | Unruly PAX | Passenger Seatbelts |
| 10F/A Station | Hijacking | FA Position |
| Retracts | Contents of FA Manual | Passenger Monitoring |
| Seatbelts/Inertial Locks | 4Ability/Proficiency | Doors de-armed |
| PA and Interphone | Remove/Demo use of | |
| 11Galleys | O ₂ and Fire Bottles | |
| Latch Mechanisms | Demo Emergency Exit | (See back for Remarks) |
| Restraints, Tiedowns, | Procedures | |
| Covers | Demo "Brace for Impact" | |
| Cleanliness/Corrosion | Position | |
| Lifts/Elevators | Demo Donning of Life | |
| Water Quality | Vests | |
| | | |

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| REMARKS: | |
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| OVERALL RESULT: Satisfactory | INSPECTOR=S NAME AND SIGNATURE |
| Unsatisfactory Unsatisfactory | Page 2 of 2 |

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CHAPTER 11 STATION FACILITIES INSPECTION

1. BACKGROUND AND OBJECTIVES.

Section 9.6.2 of the ICAO *Manual of Procedures for Operations Certification and Inspection* provides that Station Facilities inspections should be conducted periodically at every transit base where the operator uses facilities and services in connection with his operations. Station facility operations may be defined as those support activities required to originate, turn around, or terminate a flight. A Station Facilities inspection encompasses both the operations and the facilities required to conduct them.

The DGAC must schedule regular inspections of existing operator's transit bases and ensure that newly established bases are inspected before the operator commences service to that destination.

2. GENERAL INSPECTION PRACTICES AND PROCEDURES.

Inspectors conducting station facilities inspections will encounter a wide range of situations and operational conditions. Types of stations may vary from a large facility with a permanently assigned station manager, numerous employees, and various departments, to a facility consisting of one employee and a counter. A station facilities inspection may be conducted to provide for an overall view of the operator's operation or it may be focused on a specific area of interest. Whenever possible, inspections should be conducted when actual departure or arrival operations are in progress, in order to obtain an overview of the operation of the station and the effectiveness of the equipment, services, procedures, and personnel utilized. The direction and guidance provided in this section is general in nature, not all of which may be appropriate in a given situation.

- A. An inspector should carefully plan a station facilities inspection before conducting it. He should review previous inspection reports and review any previously identified discrepancies along with any corrective actions that were taken. Inspectors should coordinate with the station manager ahead of time to establish a date and time for conducting the inspection. Station facilities inspections at small or remote locations may be conducted in conjunction with en route inspections.
- B. Before beginning the inspection, the inspector should request that the station manager provide a briefing on the facility operation, including assigned personnel and operational procedures. In turn, the inspector should discuss the purpose and scope of the inspection with the manager and his staff. This discussion should include the following:
 - Purpose of the facility inspection
 - The specific areas to be inspected
 - Inspection authority (applicable regulation)

The proposed time and place of the exit briefing

C. The actual inspection should begin after the briefing, with a tour of the facility. The tour should provide the inspector with an overview of the operation and the location of individual sections. The inspector should introduce himself to section supervisors and other employees during the facility tour in order to become familiar with each section or unit. The tour should include those areas of the facility that are utilized by the flight and cabin crews for dispatch, briefing, and flight planning, and those areas that are utilized for passenger loading, cargo loading, weight and balance preparation, and ramp areas.

3. SPECIFIC INSPECTION AREAS.

There are eleven areas which should be addressed during a station facility inspection:

- A. Personnel. The inspector should review the staffing of the facility. During this review the inspector should attempt to determine if the station is adequately staffed and if the assigned personnel are competent in performing their duties. This may be accomplished by the inspector observing individuals as they perform their assigned job tasks. For example, the inspector may review recently completed forms for accuracy and may interview personnel regarding their job functions. Certificates should be sampled for appropriateness and currency for those personnel whose job functions require that they hold certificates. Duty time and length of shifts should be checked for reasonableness. Lengthy duty periods may indicate inadequate staffing.
- B. Manuals. The inspector should review the operator's manual or system of manuals for the operation of the facility to determine if the necessary manuals are on hand, current, readily available to personnel, and adequate in content.
 - (1) Availability. The inspector should determine prior to the inspection what manuals should be on hand. As with all inspections, a sound prior knowledge of the operator's organization and procedures is invaluable. During the course of the inspection, the inspector should reach a conclusion as to whether these manuals are sufficient or if station personnel require any additional information which was not available.
 - (2) Currency. The inspector should also ensure that the operator's manuals are current and that required revisions accurately posted. An inspector should obtain information on the revision status of manuals from the supervising inspector and/or the operator before beginning the inspection.
 - (3) Adequacy. Each manual or publication should be checked by the inspector to ensure that it includes that information and guidance necessary to allow personnel to perform their duties and responsibilities effectively and safely. Manuals or instructions which

are kept at transit stations typically provide guidance and procedures for the following operational areas:

- Refueling procedures
- Aircraft towing or movement requirements/procedures
- Weight and balance procedures
- Operation of and procedures regarding ground service equipment
- Aircraft flight manual (AFM) (for types of aircraft regularly scheduled)
- Personnel training manual
- Current emergency telephone listing
- Accident/incident telephone listing
- Security training and procedures
- Severe weather notification procedures
- Carry-on baggage procedures
- Identification or handling of hazardous materials/procedures
- Instructions and procedures for notification of PIC when there are hazardous materials aboard
- Contract services (if applicable)
- Trip records disposition
- C. Records. Records which are required to be kept at the transit base or are kept at the discretion of the operator should be inspected. These may include:
 - Crew and duty time records
 - Trip records
 - Communications (ground to aircraft) records.
- D. Training. The inspector should review the training conducted for the various classifications of station personnel. Although the Aviation Act. No. 15 of 1992 may not require specific training for support personnel; such personnel should receive both initial and recurring training in assigned job functions. This training may be either formal classroom training or on-the-job training. Specific areas of concern are:
 - Duties and responsibilities
 - Hazardous materials
 - Passenger handling and protection
 - Load planning and weight and balance procedures
 - Manual backup procedures in case of computer or communications equipment failures
 - Aircraft servicing and ramp operations
 - First aid and emergency actions
 - Communications procedures
- E. Facility/Equipment/Surface. The operator's facilities must be adequate to provide safe operating conditions for both aircraft and personnel. The inspector should conduct an evaluation to ensure the following:
 - (1) Ramp Areas. Ramp areas should be clean and clear of foreign objects. The operator should have a regular program for inspecting

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- and cleaning ramp surfaces. In northern climates, adequate facilities must be available for snow removal.
- (2) Passenger Movement. Employees and passengers must be protected from jet or prop blast. Inspectors should evaluate passenger handling procedures and facilities and give particular attention paid to the movement of passengers across ramps. The operator should have established procedures for assisting handicapped passengers, especially when boarding ramps are not used.
- (3) Lighting. To ensure that adequate lighting is available and is being used for safe ground operations, inspectors should conduct observations during night operations, if feasible.
- (4) Hazards and Obstructions. The operator's management usually assigns to station managers or supervisors the responsibility for maintaining surveillance of the airport and for reporting airport hazards and any new obstructions. Inspectors should determine what responsibilities have been assigned and how those responsibilities are being discharged.
- F. Conformance. In each area inspected, inspectors should evaluate the operator's procedures for compliance with provisions of the applicable regulatory guidance. In addition, the operator's employees must comply with the operator's directives. The conformity section on the checklist is not intended to be a separate and distinct inspection function but is intended to serve as a reminder of these elements.
- G. Flight Control. The inspection of a station's flight control function should be conducted at a time when actual arrival or departure operations are in progress. This allows the inspector to get an overall view of the effectiveness of the operation and assigned personnel.
 - (1) When a dispatch or flight-following center is located within the station, an operational control inspection should be conducted in conjunction with the station facilities inspection.
 - (2) Flight Plans. Operators often exercise operational control from a central location and task the transit stations with related support functions, such as delivering dispatch releases and flight plans to the flightcrew. In this situation, inspectors should determine which functions are the responsibilities of the station. Inspectors should evaluate station personnel in the performance of these functions, as well as for the effectiveness of the division of responsibility between the central flight control center and the line station.
 - (3) Load Planning. Inspectors should determine responsibilities for load planning and weight and balance control. Passenger and cargo weights must be accurate and reliably obtained, collected, and transmitted. Personnel must be adequately trained. Procedures should be simple and effective. When computerized systems are used, there should be adequate back-up provisions for computer failure. If station personnel are assigned to perform manual calculations in case of computer failure, there should a means of ensuring continued proficiency of personnel in making these

- calculations. Inspectors should ask these individuals to perform a manual calculation and compare the individual's solution to the computer solution.
- (4) Weather. Inspectors should determine the official source of weather for the station, and whether or not this source is adequate for the operation and is acceptable to the DGAC.
- (5) NOTAMs. If the station is responsible for disseminating NOTAMs to flight crews, currency of NOTAMs and the method for updating should be examined
- H. Servicing. The servicing area of a station facilities inspection covers routine loading and servicing as opposed to maintenance activities. While operations inspectors should record and report observations they believe to be maintenance discrepancies, they are not assigned to inspect the maintenance area. Inspectors should evaluate areas of concern to operations personnel, such as the manner in which logbooks are handled and MEL provisions are complied with. The inspector should observe the operator's service operations to ensure that safe practices are conducted and that adequate personnel are available for the required aircraft servicing. The operations that the inspectors should observe may include, but are not limited to, the following:
 - Fueling (ensuring that proper procedures are being followed)
 - Oil and hydraulic servicing (ensuring that proper procedures are being followed)
 - Potable water servicing (Source of water, cleanliness of storage facilities, and proper handling)
 - Deicing (ensuring the correct ratio of glycol/water is being used and that all snow and ice is removed
 - Marshalling (ensuring safe operation and correct procedures)
 - Chocks/Mooring (ensuring chocks are in place, the parking ramp is level, and brakes are set or released)
- I. Management. Managers should be thoroughly aware of their duties and responsibilities and those of the personnel they supervise. Areas that inspectors should observe and evaluate include the following:
 - Communications. Throughout the inspection, inspectors should observe managers and supervisors, and evaluate the organizational structure, particularly the effectiveness of vertical and horizontal communications.
 - (2) Contract Services. If the operator contracts with other companies for station services, the station manager should have established adequate controls over their performance. The manager must assure adequate training is provided to contractor personnel.
 - (3) Contingency Planning. The station management should be prepared for contingencies. Action plans should be available for use in case of such events as accidents, injury, illness, fuel spills, bomb threats, hijacking, severe weather, and hazardous material spills. Station

personnel should be knowledgeable as to the location of these plans. Plans should contain emergency notification checklists and procedures for suspending or canceling operations. Emergency telephone listings should be posted in obvious locations and be clearly legible.

- J. Security. Security procedures should be observed with regard to passenger and cargo screening, integrity of sterile areas, and access to ramp and other restricted areas.
- K. Aerodrome. Operations inspectors should be alert for obvious deficiencies in aerodrome facilities and condition, such as fire fighting equipment, medical services, and ramp and vehicle control. Other areas, such as marking, lighting, obstructions, navigation facilities, approach aids, etc. are more properly observed in the course of conducting other types of inspections such as cockpit en route inspections and ramp inspections.

4. STATION FACILITIES INSPECTION REPORT.

The Air Operator Station Facility Inspection Checklist/Report form at the end of this chapter will be used for all such inspections. It is organized around the same inspection areas which are covered in paragraph 11.3 of this chapter. When completing the report form, discrepancies observed during the inspection should be documented along with any on-the-spot corrective action taken by the inspector. Any recommended corrective actions should also be noted on the report.



Operator

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Aircraft Type(s) (List)

Date

AIR OPERATOR STATION FACILITY INSPECTION CHECKLIST/REPORT

Location.

| Management and Name: Title: Supervisory Name: Title: Personnel (List): Name: Title: S=Satisfactory; U=Unsatisfactory; P=Potential; I=Information; E=Exceeds; N=Not Observed; NA=Not Applicable | | | | | |
|---|--|--|--|--|--|
| A. PERSONNEL 1 Adequacy of Staffing 2 Competence B. MANUALS 1 Available 2 Current 3 Adequate Information • Refueling Procedures • Aircraft Towing & Movement • Weight and Balance • Operation of GSE • AFM and Performance • Training Requirements • Emergency Phone List • Accident/Incident Procedures • Security • Severe Weather • Carry-on Baggage • Hazardous Materials • Contract Services • Trip Records Disposition C. RECORDS 1 Trip 2 Crew and Duty Time 3 Communications REMARKS (Continue on back if neces | D. TRAINING 1 Duties and Responsibilities 2 Hazardous Materials 3 Passenger Handling 4 Load Planning 5 Aircraft Servicing 6 First Aid and Emergency | H. SERVICING 1 Loading 2 Logbook/MEL Entries 3 Fueling 4 Oil/Hydraulic Service 5 Potable Water Service 6 Deicing 7 Marshalling 8 Chocks/Mooring I. MANAGEMENT 1 Communications 2 Contract Services 3 Contingency Planning J. SECURITY 1 Passenger Screening 2 Baggage and Cargo | | | |
| OVERALL RESULT: Satis | factory INSPECTOR= | =S NAME AND SIGNATURE | | | |

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Unsatisfactory

CHAPTER 12 RAMP INSPECTIONS

1. BACKGROUND AND OBJECTIVES.

Section 9.6.3 of the ICAO *Manual of Procedures for Operations Certification and Inspection* states that a Ramp (Apron) inspection presents an excellent opportunity for an overall evaluation of an operation actually being conducted.

The primary objective of a ramp inspection is to provide the DGAC with the opportunity to evaluate an airline operation while the crewmembers and aircraft are on the ground. Ramp inspections allow inspectors to observe and evaluate the routine methods and procedures used by an operator's personnel during the period immediately before or after a flight, and to determine the operator's compliance with regulations and safe operating practices. A ramp inspection is an effective method for evaluating an operator's ability to prepare both the aircraft and crew for a flight to be conducted. When conducted after the completion of a flight, a ramp inspection is an effective method for determining whether the aircraft and crew were adequately prepared for the flight; as well as for evaluating the operator's postflight and/or turnaround procedures and crewmember and ground personnel compliance with these procedures.

2. GENERAL RAMP INSPECTION PRACTICES AND PROCEDURES.

- A. Ramp inspections may be conducted before a particular flight, at en route stops, or at the termination of a flight. A ramp inspection may be conducted any time an aircraft is at a gate or a fixed ramp location, provided the inspection is conducted when the crew and ground personnel are performing the necessary preparations for a flight or when they are performing postflight tasks and procedures.
- B. The operator should not have to be given advance notice that a ramp inspection is going to be conducted. Inspectors must, however, conduct inspections in a manner that does not unnecessarily delay crewmembers and/or ground personnel in the performance of their duties. The following are recommended guidelines for inspector conduct during ramp inspection activities:
 - (1) Inspectors should not interrupt crew or ground personnel when they are performing a particular phase of their duties.
 - (2) When inspection activities require inspectors to interact directly with the crew or ground personnel, the activities should be timed to be accomplished when the crew or ground personnel are waiting to begin another phase of their duties or after they have completed one phase of their duties and before they begin another phase.
 - (3) Inspection activities must be timed so that they do not delay or interfere with passenger enplaning or deplaning.
 - (4) Inspection activities should not adversely impede aircraft servicing or catering.

3. RAMP INSPECTION AREAS.

A ramp inspection may be thought of as a "snapshot" of an airline's operation during which an inspector may observe, in a short period of time, many of the areas which are also examined during the more time-consuming Station Facility Inspections, Cockpit Enroute Inspections, and Cabin Inspections. Areas which may be observed and evaluated during ramp inspections fall into five different categories:

- A. Crewmember. Refers to the evaluation of crewmember preparation for flight and compliance with postflight procedures. This area includes evaluations of crewmember manuals and any required flight equipment, flightcrew flight planning, flightcrew airman and medical certificates, crewmember disposition of trip paperwork, and other items that relate to crewmember responsibilities.
- B. Station operations. Refers to the various methods and procedures used by the operator to support the flight, such as distribution of dispatch, flight release, and flight-locating paperwork; distribution of weather reports, PIREP's and other flight planning material; passenger handling; boarding procedures; and carry-on baggage screening.
- C. Aircraft. Refers to the aircraft's general airworthiness, logbook entries, MEL compliance, carryovers, and required items of emergency and cabin safety equipment.
- D. Servicing and maintenance. Applies to any ongoing maintenance and servicing, such as fueling, deicing, or catering. This area is usually evaluated in detail by airworthiness inspectors when performing their own ramp inspections. Operations inspectors may, however, observe certain items in this area and comment on obvious deficiencies for airworthiness inspector follow-up.
- E. Ramp and gate condition and activity. Refers to taxi and marshalling operations, ramp or parking area surfaces, any apparent contamination or debris, vehicle operations, and the condition and use of support equipment.

4. SPECIFIC RAMP INSPECTION PRACTICES AND PROCEDURES.

Because of the wide range of inspection areas involved, ramp inspections are usually limited in scope. There are many preparatory or postflight actions that occur simultaneously and one inspector cannot physically observe all of these actions for a particular flight. For this reason, the inspector should vary the areas of emphasis over several inspections. For example, on one ramp inspection the inspector may decide to observe and evaluate the PIC accomplishing flight planning and the operator's methods for providing the flightcrew with appropriate flight planning support. On another ramp inspection, the inspector may decide to observe the SIC accomplish the aircraft exterior preflight and then evaluate the aircraft's interior equipment and furnishings. As an example of a ramp inspection conducted at the termination of a flight, the inspector may decide to inspect the aircraft's interior equipment, furnishings, and aircraft logbooks, and then evaluate the trip paperwork turned

in by the crew. In this example, the inspector may not have an opportunity to interact directly with the crew, therefore the "crewmember" inspection area would not be accomplished. Inspectors should vary both the sequence and the emphasis of the inspection areas during a ramp inspection. Inspectors should describe in their reports how the inspection was limited in scope. Detailed information concerning each of the five functional areas which may be inspected follows:

- A. Crewmember Inspection Area. When an inspector makes direct contact with a crewmember, the inspector should provide an official but courteous introduction, offer appropriate identification for the crewmember to inspect, and inform the crewmember that a ramp inspection is being conducted. If the direct contact is with a flight crewmember, the inspector should request to see the crewmember's license. The inspector should review the license to see that it meets the appropriate requirements for both the duty position and for the aircraft for the flight to be conducted or that was just terminated. When the direct contact is with flight crewmembers or flight attendants, the inspector should also request to crewmember's professional equipment. Crewmember professional equipment includes any equipment that crewmembers are required to have according to regulation or operator policies, either on their person or that which will be available during the flight. Examples of professional equipment include aeronautical charts, appropriate operator manuals, and operable flashlights. Inspectors should determine whether the charts and manuals carried by crewmembers are current. The following is a list of other items and activities that, depending on the scope of the ramp inspection, may be observed and evaluated:
 - Flightcrew flight-planning activities, such as review of weather, flight plans, anticipated takeoff weight and performance data, flight control requirements (dispatch, flight release, flight-locating, ATC flight plans)
 - Flightcrew aircraft preflight activities, such as exterior walkaround, logbook reviews, and cockpit setup procedures, including stowage of flightcrew baggage and professional equipment
 - Flight attendant inspection of cabin emergency equipment and cabin setup procedures, including stowage of flight attendant baggage and professional equipment
 - Flightcrew and flight attendant postflight logbook entries and proper use of MEL's and placards
 - Completed trip paperwork and the appropriate disposition of such paperwork
- B. Station Operations Area. This area of a ramp inspection usually involves a facility (or designated area of a facility) including related ground personnel, and is commonly referred to as "line station operations." Line station operations include a designated location where crewmembers go to review and pick up required flight paperwork or to deposit flight reports, to send or receive communications with the operator's flight control system, and to join up with other crewmembers assigned to the flight. Line station operations also include gates and ramp areas where passengers and

cargo are enplaned and deplaned. The following is a list of items and activities that, depending on the scope of the inspection, may be observed and evaluated in this inspection area:

- Preflight and postflight trip paperwork, such as load manifests, flight plans, weather reports and forecasts, NOTAM's, dispatch or flight release messages and operator bulletins
- Methods used by the operator to comply with MEL and CDL requirements, particularly the preflight information provided to the crew
- Adequacy of facility with respect to crewmember and ground personnel use for completing preflight and postflight responsibilities, including work areas and administrative support (such as forms, charts, and copy machines when required by company procedures)
- Usability and currency of operator manuals and aircraft performance information maintained at the line station operations area for crew and ground personnel use
- Company communication capabilities and procedures
- Passenger enplaning and deplaning including public protection procedures and carry-on baggage screening
- Cargo and baggage loading and stowage procedures and unloading procedures
- C. Aircraft Inspection Area. Ramp inspections should include at least an examination of the aircraft's registration, airworthiness certificate, and maintenance logbook. Inspectors should plan their ramp inspection activities so that any inspection of the aircraft's interior equipment and furnishings would be conducted either before passengers are enplaned or after they are deplaned. The following is a list of items, similar to those covered during a Cabin Enroute Inspection that may be observed in this inspection area:
 - Aircraft registration and airworthiness certificates
 - Aircraft and cabin logbooks (or equivalent) (open discrepancies, carryover items, and cabin equipment items needing repair or replacement)
 - Appropriate placarding
 - Fire extinguishers (correct types, numbers and locations; properly serviced, safetied, tagged, and stowed)
 - Portable oxygen bottles (correct numbers and locations; properly serviced, tagged, and stowed; condition of mask, tubing, and connectors)
 - Protective breathing equipment (properly located, stowed, and sealed)
 - First aid kits and emergency medical kits (correct numbers and locations; properly sealed, tagged, and stowed)
 - Megaphones (correct numbers and locations; in operable condition, and properly stowed)

- Crash ax (properly located and stowed)
- Passenger briefing cards (one at each seat position; appropriate to aircraft; required information including emergency exit operation, slides, oxygen use, seatbelt use, brace positions, flotation devices; appropriate pictorials for extended overwater operations, including ditching exits, life preserver, and life or slideraft inflight location)
- Passenger seats (not blocking emergency exits; TSO label on flotation cushions; cushion intact; latching mechanism on tray tables; armrests have self-contained and removable ashtrays; seatbelts properly installed, operational, and not frayed or twisted; life preservers available and CO₂ cartridges not expired)
- Passenger oxygen service units (closed and latched with no extended red service indicators or pins)
- Flight attendant stations (operable seat retraction and restraint systems; properly secured; harnesses not frayed or twisted; seat cushions intact; headrests in correct position; PA system and interphone)
- Galleys (latching mechanisms primary and secondary; tiedowns; condition of restraints; padding; proper fit of cover and lining of trash receptacles; hot liquid restraint systems; accessibility and identification of circuit breakers and water shut-off valves; non-skid floor; girt bar corroded or blocked by debris; clean stationary cart tiedowns (mushrooms); galley carts in good condition and properly stowed; lower lobe galley emergency cabin floor exits passable and not blocked by carpeting, if applicable)
- Galley personnel lift, if applicable (no movement up or down with doors open; safety interlock system; proper operation of activation switches)
- Lavatories (smoke alarms; no-smoking placards; ashtrays; proper fit of cover and lining of trash receptacles; automatic fire extinguisher systems)
- Stowage compartments (weight restriction placards; restraints and latching mechanisms; compliance with stowage requirements; accessibility to emergency equipment; carry-on baggage provisions)
- Required placards and signs (seatbelt, flotation equipment placards at seats; emergency/safety equipment placards; weight restriction placards; no-smoking/seatbelt signs; no-smoking placards; exit signs and placards, including door opening instructions)
- Emergency lighting system (operation independent of main system; floor proximity escape path system; controllability from cockpit)
- Exits (general condition; door seals; girt bars and brackets; handle mechanisms; signs; placards; slide or slideraft connections and pressure indications; lights and switches)
- Main landing gear viewing ports, if applicable (cleanliness and usability)

D. Servicing and Maintenance Inspection Area. The servicing and maintenance of the aircraft may be observed at any time during the ramp inspection. The following is a list of some areas that may be observed and evaluated in this inspection area:

- Fueling procedures (ground wires in place; fuel slip properly completed; fueler trained in the operator's specific procedures; fuel tested for water contamination)
- Routine maintenance (qualifications of mechanics, repairmen or service agents; appropriate logbook entries)
- Deicing procedures (where applicable)(compliance with company procedures; proper glycol/water ratios and temperatures; avoidance of engine/APU inlets; removal of all snow and ice; trailing and leading edges free of snow and ice and covered completely with deicing fluid)
- Correct procedures used by service contractors (caterers; cleaners; lavatory and water servicing personnel; correct use of switches and controls)
- E. Ramp and Gate Condition and Activity Inspection Area. During ramp inspections, inspectors should observe and evaluate the ramp and gate surface condition as well as any support activities being conducted during an inspection. Inspectors should observe vehicular operations on the ramp and around gate areas and other aircraft operations during marshalling, taxiing, or towing operations. Inspectors should report any condition that appears to be unsafe or could potentially be unsafe. The following is a list of some items that may be observed and evaluated in this inspection area:
 - Ramp, apron, and taxiway surfaces (general condition; cracks; holes; uneven surfaces)
 - Contamination debris (FOD; fuel, oil, or hydraulic spills; snow and ice accumulations)
 - Marking and Lighting (taxi lines; gate markings; signs; signals)
 - Construction (appropriate barriers; signs; markings; flags)
 - Vehicular operations (conducted safely around aircraft and gate areas by qualified personnel)

5. AIRLINE RAMP INSPECTION CHECKLIST/REPORT.

The Air Operator Ramp Inspection Checklist/Report which is included at the end of this chapter will be used for all such inspections. This form follows the sequence contained in paragraph 12.4 above and contains checklist items ("reminders") that may be observed and evaluated by the inspector. It is recommended that inspectors complete only those areas of the form which have been the focus of his inspection, and document the limited nature of the inspection by marking "N" (Not Observed) next to the items not covered.



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AIR OPERATOR RAMP INSPECTION CHECKLIST/REPORT

| Operator | | Flight No. | Date | Location | | Aircraft Ty | pe | Reg. Mark |
|----------|----------|---------------|------|----------|------|-------------|------|-----------|
| Captain | Lic. No. | First Officer | | Lic. No. | Othe | er Crew | Lead | F/A |

S=Satisfactory; U=Unsatisfactory; N=Not Observed

| S=Satisfactory; U=Unsatisfactory; N=Not Observed | | | | | |
|---|--|--------------------------|--|--|--|
| CREWMEMBERS Certificates Required Equipment Manuals Available Current Flight Planning Weather Flight Plans Notams Weight and Balance Takeoff and Performance Dispatch/Flight Release Flightcrew Aircraft Preflight Exterior Walkaround Logbook Review Cockpit Setup Crew Baggage Stowage MEL Items and Placards Coordination with Cabin and Groundcrew Pushback/Taxi Flight Attendant Preflight Emergency Equipment Inspection Cabin Setup Crew Baggage Stowage Passenger Handling Passenger Carry-on Baggage Stowage Flightcrew and FA Postflight Logbook and MEL use Completed Trip Paperwork LINE STATION DPERATIONS Trip Papers Load manifests | atisfactory; U=Unsatisfactory; N: C. AIRCRAFT/EQUIPMENT 1Certificates/Placards 2Logbooks | ## Personnel Lift 14. | | | |

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| REMARKS: | | |
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| OVERALL RESULT: | Satisfactory | INSPECTOR=S NAME AND SIGNATURE |
| | Unsatisfactory | |

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CHAPTER 13

FLIGHT CREW MEMBER PROFICIENCY AND COMPETENCY CHECKS

1. BACKGROUND AND OBJECTIVES.

Operators are required to conduct proficiency and competency checks to ensure that all flight crew members are competently performing their duties and responsibilities. ICAO Annex 6, Part 1, Section 9.4.4 provides that such checks shall be performed twice within the period of one year. Paragraph 9.6.6 of the *Manual of Procedures for Operations Certification and Inspection* states that inspectors must ensure that proficiency checks of the operator's flight crew personnel are carried out in accordance with the standards and frequency prescribed in the regulations. Qualified inspectors should be authorized to administer proficiency and competency checks or to observe these checks at any time as an inspection job function. The objectives of a proficiency or competency check inspection are as follows:

- Evaluate individual aircrew performing their duties and responsibilities
- Assess the effectiveness of the operator's training program
- Evaluate individual company check pilot performing their duties and responsibilities
- Evaluate the effectiveness of the operator's trend analysis, standardization, and quality control program
- Identify previously approved or accepted operational procedures, manuals, or checklists which are deficient
- Assess the effectiveness of the operator's simulators and equipment
- A. Flight crew member Competency. A flight crew member must perform specific events in an aircraft, an aircraft simulator, a flight training device, or a combination thereof during a proficiency or competency check. The events performed during the check depend on the type of operation conducted and the flight crew member's duty position (PIC, SIC, or FE).
- B. Evaluating the Operator's Training Program. The analysis of proficiency or competency check inspection results is an excellent means for the DGAC to ensure the continued effectiveness of an operator's training program. When deficient areas are identified, they should be rectified by changes in the operator's training program. For example, if inspection comments repeatedly indicate deficiencies in the area of nonprecision approaches, the DGAC should require the operator to emphasize that event in flight training curriculum segments.
- C. Competence of Each company check pilot. The inspector will observe company check pilot or examiners conducting proficiency or competency checks. These observations enable the DGAC to evaluate both the individual company check pilot performing his duties as well as the company's entire company check pilot program.

(1) The company check pilot is responsible for ensuring that all required flight test events are completed in a realistic flight scenario, for providing adequate preflight and postflight briefings for the airman being checked, and for objectively evaluating the airman's performance. An evaluation of the company check pilot's ability to actually perform the flight events of the proficiency or competency check is not normally part of a company check pilot inspection. A company check pilot should maintain basic qualification in the duty position in accordance with applicable DGAC regulations. Should a question concerning the company check pilot's basic qualifications arise, a separate inspection may conducted in accordance with statutes which the country should have regarding re-examination for competency.

- (2) Inspectors will place emphasis on the competence of each company check pilot as an evaluator. Before designation, each company check pilot must be observed performing those company check pilot duties which will be authorized after designation. After designation, when resources permit, each company check pilot will be observed annually. When resources do not permit annual observations, observations should be conducted as frequently as possible. Priority should be placed on observing those company check pilot who have not been observed for the longest period of time.
- (3) Whenever a question concerning a company check pilot's competency arises, a company check pilot inspection should be conducted as soon as possible. For example, an inspection of a company check pilot should be conducted immediately if an airman, whom the company check pilot has passed on a proficiency or competency check, is subsequently found to be deficient in terms of the qualification standards.
- D. Effectiveness of an Operator's Trend Analysis, Standardization, and Quality Control Program. Operators should collect, record, and analyze the results from proficiency and competency checks to detect and correct deficiencies in training programs, procedures, and checklists. The DGAC will encourage operators with more than 10 crewmembers in any duty position to establish trend analysis. Inspectors will evaluate the effectiveness of these programs.
- E. Manuals, Procedures, and Checklists. Inspectors can use the data from proficiency or competency checks, combined with data from other inspections (such as cockpit, en route, and ramp inspections), to identify deficiencies in manuals, procedures, or checklists previously approved or accepted by the DGAC. Checklist procedures, MEL/CDL procedures, and specific flight maneuvers and procedures are operational areas that may require change to ensure compliance with the regulations or safe operating practices.
- F. Simulators and Equipment. In the course of monitoring proficiency of competency checks, inspectors will have the opportunity to observe the

operation of flight simulators, CPTs, and other training devices. Any obvious deterioration in the operation or maintenance of a simulator or training device should be brought to the attention of the operator.

2. PROFICIENCY/COMPETENCY CHECK INSPECTION AREAS.

Five specific areas may be identified as areas to be observed and evaluated during proficiency or competency check inspections:

- Competency of flight crew member being checked
- Content of check
- Competency of company check pilot as an evaluator
- Manuals, procedures, and checklists
- Flight simulators and training equipment
- A. Flight crew member competency. This inspection area applies to the knowledge, ability, and proficiency of the flight crew member receiving the proficiency or competency check, as demonstrated by his performance during a series of required maneuvers and flight regimes. The inspector takes into account such items as:
 - Knowledge of the aircraft, its systems, and components
 - For pilots: Proper control of airspeed, configuration, direction, altitude, and attitude in accordance with the procedures and limitations contained in the manufacturers aeroplane flight manual, the operator's Aircraft Operating Manual, checklists, and other material applicable to the type of aircraft.
 - For pilots: Control of the aircraft as delineated above over full range of maneuvers and flight regimes including takeoff, climb, cruise, descent, approach, landing, and during emergency and abnormal situations.
 - For flight engineers: Management of the aircraft systems from the flight engineer position through a variety of flight regimes and in a variety of normal, abnormal, and emergency situations.
 - Crew coordination (cockpit resource management and coordination with ground personnel and cabin crew)
 - Currency of the flight crew member's manuals
 - Possession of appropriate ratings and endorsements

A list of required, graded maneuvers is contained in the "Pilot Proficiency" (Part A) and "Flight Engineer Proficiency" (Part B) sections of the Proficiency Check Report at the end of this chapter. Separate columns are provided for indicating whether the maneuvers or procedures are accomplished in the aircraft or simulator. Spaces are also provided for indicating whether or not the flight crew member's license is current and has the appropriate endorsements, whether or not the airman's personal manuals are kept up to date, and for indicating whether or not the results of the written or oral equipment examination was satisfactory or unsatisfactory. Part C of the Proficiency Check Report has spaces for grading the following items:

B. Content of Check. In this inspection area the inspector evaluates whether all of the required maneuvers were accomplished in the course of the check. Operators normally develop their own company forms to provide a list of items to be accomplished by company check pilot, and to serve as a record of the results of the completed check. When items required by regulations are not accomplished by the company check pilot during the course of a proficiency check, it may indicate a weakness in operator's report form or a lack of understanding of the contents of the form by the company check pilot.

- C. Competency of company check pilot as an Evaluator. This inspection area applies to the inspector evaluating the manner in which a company check pilot conducts the check, the accuracy and completeness of the company check pilot's observations, and the validity of the outcome. Such items as company check pilot briefings (before and after the check), are observed and evaluated by the inspector during the conduct of the check.
- D. Manuals, Procedures and Checklists. This inspection area refers to the inspector observing the manuals, procedures, and checklists used during the conduct of the flight. While conducting proficiency or competency check inspections, inspectors have an opportunity to observe deficiencies in previously approved or accepted material that can only be detected while the material is in use. Such observations may provide the only opportunities inspectors have to observe the operator's non-normal and emergency procedures in use.
- E. Flight Simulators and Training Equipment. This inspection area refers to the condition of the aircraft, simulators, or training devices which are used to conduct the check. When evaluating the equipment, inspectors should determine that required inspections been conducted, observed discrepancies are recorded on maintenance logs, and the equipment in an adequate state of repair.

3. GENERAL INSPECTION PRACTICES AND PROCEDURES.

A proficiency or competency check inspection is either accomplished by the inspector conducting a check or by the inspector observing a company check pilot conducting a check. In either case, the inspector should be adequately prepared to conduct the inspection.

- A. In addition to becoming thoroughly familiar with the operator's manuals, the inspector should be required to qualify in the operation of the aircraft, simulators, or training devices. Inspectors should be familiar with the following areas before conducting proficiency and competency check inspections:
 - Inspector, safety pilot, and crew qualification for simulators, flight training devices, and aircraft
 - Acceptable methods for presenting the maneuvers and events of the check in simulators, flight training devices, and aircraft

- Acceptable standards of performance
- B. When a proficiency check or competency check is conducted by a company check pilot and observed by an inspector, both the airman being checked and the competency of the company check pilot administering the check are evaluated by the inspector. The company check pilot should be responsible for:
 - completing all required checking events
 - providing suitable briefings before and after the session
 - fairly and objectively evaluating the flight crew member being checked
- C. After the check is completed, the inspector should be responsible for debriefing both the flight crew member who was checked (if the company checks pilot's debriefing was inadequate) and for debriefing the company check pilot who conducted the check.
 - (1) The inspector's primary responsibility is to observe and evaluate the overall conduct of the check. The inspector should refrain from asking questions of the airman being checked, refrain from attempting to control the type or sequence of checking events, and refrain from interfering in any way with the manner in which the company check pilot conducts the check.
 - (2) It is the company check pilot's responsibility to conduct a complete and proper check. The inspector's responsibility is to evaluate the performance of both the airman being checked and the company check pilot, to debrief each one, and to properly record the inspection results. Should the company check pilot's performance be unsatisfactory, the inspector should complete and sign the evaluation form of the airman receiving the check. Should the company check pilot fail to complete all required items on a check (which have been satisfactory to that point) the inspector should bring this fact to the attention of the company check pilot and ensure all events are completed.
- D. While certain training benefits are gained during proficiency or competency checks, the purpose of a check is to have the airman's state of proficiency evaluated and to ensure that the last training conducted has been sufficient to ensure the flight crew member's proficiency throughout the interim period. If the company check pilot conducting the check observes minor deficiencies (and believes that minor instruction may correct the situation) the company check pilot may suspend the check temporarily, conduct remedial training, and then resume the check. However, company check pilot should not repeat events several times until they are performed in an acceptable manner.
 - (1) When a proficiency or competency check is interrupted to conduct training, that check should still be completed within the time frame the operator originally scheduled for the check. If training is so extensive that the check cannot be completed in the allotted time, the inspector should grade the check unsatisfactory and place the flight crew member in prequalification training.

(2) If an inspector is conducting the check and unsatisfactory performance is observed, the inspector should complete as much of the remaining flight events as possible or terminate the check. Inspectors should not conduct flight crew member training during proficiency or competency checks.

(3) Inspectors should record the time required to complete checks and the amount of remedial training conducted while the check was suspended. Supervisory Inspectors should compare the time these checks require when conducted by company check pilot and inspectors. The Supervisory Inspector should periodically compare these times against the time allotted for the check by the operator.

4. FLIGHT CREW MEMBER PROFICIENCY AND COMPETENCY CHECKLIST/REPORT FORM.

An Air Operator Proficiency and Competency Checklists/Report form is included at the end of this chapter. This form will be used for all such inspections. The events that should typically be conducted on proficiency checks for pilots and flight engineers serving in scheduled large aircraft operations appear under the "Pilot Proficiency" and "Flight Engineer Proficiency" area of the form.



DEPARTMENT OF COMMUNICATION DIRECTORATE GENERAL OF AIR COMMUNICATIONS

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AIR OPERATOR PILOT/FE PROFICIENCY CHECK REPORT

| Company | Date | Base | Type Aircraft | Type Simulator |
|------------|---------------------------|------|----------------|----------------|
| Pilot Name | Company Check Pilots Name | | Simulator Time | Aircraft Time |

S=Satisfactory; U=Unsatisfactory; N=Not Observed AC (column) = maneuver graded in aircraft; SIM (Column) = Maneuver graded in simulator

| PILC | PILOT COMPETENCY | | | |
|------|------------------|--------------------------------------|--|--|
| | | License | | |
| | | Currency of Manuals | | |
| | | Equipment Examination. | | |
| AC | SIM | PREFLIGHT | | |
| | | Preflight Inspection | | |
| | | Taxiing | | |
| | | Powerplant Checks | | |
| AC | SIM | TAKEOFFS | | |
| | | Normal | | |
| | | Instrument | | |
| | | Crosswind | | |
| | | With Simulated Powerplant Failure | | |
| | | Rejected | | |
| AC | SIM | INSTRUMENT PROCEDURES | | |
| | | Area Departure | | |
| | | Holding | | |
| | | Area Arrival | | |
| | | ILS Approach | | |
| | | Other Instrument Approaches | | |
| AC | SIM | IN-FLIGHT MANEUVERS | | |
| | | Steep Turns | | |
| | | Stalls | | |
| | | Specific Flight Characteristics | | |
| | | Powerplant failure | | |
| | | Wind shear | | |
| | | Unsual attitude | | |
| | | CRM | | |

| AC | SIM | LANDINGS | |
|----|-------------------------------|---|--|
| | | Normal | |
| | | From ILS Approach | |
| | | Crosswind | |
| | | With Simulated powerplant Failure | |
| | | Rejected | |
| | | From Circling Approach | |
| AC | SIM | OTHER | |
| | | Emergency Procedures | |
| | | Judgment | |
| | | Crew Coordination | |
| B. | B. FLIGHT ENGINEER COMPETENCY | | |
| | | License | |
| | | Currency of Manuals | |
| | | Equipment Examination | |
| AC | SIM | | |
| | | Preflight Check | |
| | | Computation of Fuel Load and Fuel Loading Procedure | |
| | | Completion of Company Forms | |
| | | Engine Start | |
| | | Procedures during Taxi | |
| | | Powerplant Checks | |
| | | Cruise Control | |
| | _ | Powerplant Operation | |

| AC | SIM | | | |
|----|----------|--|--|--|
| | | Fuel System Management | | |
| | | Air Conditioning and Pressurization Control | | |
| | | Electrical System Operation | | |
| | | Engine Fire Control | | |
| | | Emergency Gear and Flap Extension | | |
| | | Cargo Compartment Fire | | |
| | | Smoke Evacuation | | |
| | | Rapid Pressurization Loss | | |
| | | Fuel Dumping | | |
| | | In-flight Engine Shutdown and Restart | | |
| | | De-icing and Anti-icing | | |
| | | Use of Emergency Equipment | | |
| | | Other Emergency Procedures | | |
| | | Crew Coordination | | |
| C. | C. OTHER | | | |
| | | Content of Check | | |
| | | Check Flight crew member Competency | | |
| | | Manuals, Procedures, and Checklists | | |
| | | Flight Simulator and Training Equipment | | |

(See Back For Comments)

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| REMARKS: | | |
|-----------------|----------------|--------------------------------|
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| OVERALL RESULT: | Satisfactory | INSPECTOR=S NAME AND SIGNATURE |
| | Unsatisfactory | 5.5.5.15112 |

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APPENDIX A

EXPLANATION OF GRADING CODES USED ON REPORT FORMS

1. GRADING CODES USED ON CHECKLISTS AND REPORTS ("U","P","I","E").

The inspector grading codes which appear on the checklist/report forms in Volume 3 of this manual designed to provide inspectors with flexibility to express their opinions about evaluations or observations. It is often difficult to classify an observation or evaluation as simply "satisfactory" or "unsatisfactory." Grading codes provide inspectors with the latitude to express an opinion that an evaluation or observation indicates a potential problem, that a recorded comment is simply informational in nature, or that an operator exceeds required standards. A detailed explanation regarding the intended meanings of these codes follows:

- A. *Unsatisfactory*. "U" (unsatisfactory) means that, in the inspector's opinion, a person, item, or subject area was not in compliance with either regulations or safe operating practices, or was either inadequate or unacceptable. Items graded "U" should be commented upon in detail in the 'comments' section of the report. If an inspector is able to correct a situation or deficiency which was unacceptable during the work activity, he may still record an "unacceptable" opinion code. In this case, however, the inspector's comment should include that corrective action was taken. The "unacceptable" opinion code provides information for future analysis and trend identification.
- B. Potential. "P" (potential) means that, in the inspector's opinion, there was potential for a person, item, or subject area to be in noncompliance with either the regulations or safe operating practices, or to be at least partially inadequate. The "potential" opinion code indicates the possibility that a problem exists or may exist. This code is useful for the identification of trends that could lead to more serious problems. The code also provides inspectors with a way to classify comments traditionally known as "grey areas." This code may be used for situations or procedures which are technically in compliance with regulations or approved procedures, but which from a practical viewpoint are poorly planned and/or executed, and therefore could have caused noncompliance with a regulation or safe operating practice. In these situations the "potential" opinion code along with an appropriate narrative comment can be used to indicate that noncompliance could have occurred, had the inspector not intervened. For example, an inspector had to remind a crewmember to fasten the shoulder harness before takeoff. Without this reminder the potential for noncompliance with a regulation existed. Crewmembers and other company personnel, in the presence of an operations inspector, sometimes react or perform differently than they would during routine operations when an inspector is not present. This different reaction or performance becomes quite apparent to inspectors for various reasons. In such a case, the "potential" opinion code can be used to indicate that (in

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the opinion of the inspector) crewmembers or other personnel may be using different standards when an inspector is not present. Another example of the definition of "potential" opinion code can be found in the distinction between "potential" opinion code and "unacceptable" opinion code. The "unacceptable" opinion code would be used when the inspector wants to convey the belief that an actual problem exists. The "potential" opinion code, however, would be used to classify a comment when an inspector wants to convey the belief that a potential problem exists or that a situation could develop into a problem if remedial action is not taken.

- C. Information. "I" (information) means that the inspector does not have an explicit opinion about the information being conveyed in the accompanying comment. There are many reasons why an inspector may not be able to form an opinion about the information being conveyed in a recorded comment. An inspector may not have access to the necessary manuals or documents to determine whether a person, item, or subject area observed was in compliance with a regulation, a published procedure, or a safe operating practice. The "information" code provides a way to convey different kinds of information and comments to persons who review the comments so that they may form their own opinions about the information and take action if appropriate. A typical example of the use of the "I" code is for an inspector to record the last revision date of a manual. The inspector may not be aware of what the last revision date should be but when the information is reviewed by a knowledgeable official, the official can determine the status of the operator's manual revision and dissemination system. Another example of the use of the "I" code would be for the inspector to record the type of instrument approach conducted and the minimums used by the PIC. In this example, the supervising inspector, upon receiving the information can determine whether or not the crew was properly trained for the type of approach and if the PIC used the proper minimums. The primary purpose of this code is to effectively convey information to be evaluated for identifying deficiencies as well as both positive and negative trends.
- D. *Exceeds*. "E" (exceeds) means that, in the inspector's opinion, a person, item, or subject area which was observed or evaluated, exceeded recognized standards and clearly complied with regulations and/or safe operating practices. One of the primary uses of this grade is to identify trends. Information about a positive trend is useful in determining the overall capability and compliance status of an operator. The "E" opinion code is especially useful and should be used to identify positive responses to a previously-taken corrective action. Inspectors should comment on the positive results of an observation or evaluation as this type of information is valuable feedback on a person's or an operator's performance. An example of the use of the "E" opinion code is the recording of positive comments about the proficiency of crewmembers who have just completed a training curriculum. Such information indicates that the training provided by the operator is highly effective.

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2. INSPECTOR'S NARRATIVE COMMENT.

An inspector's narrative comment of observations and evaluations is the most important part of the overall work activity report. The narrative comments are the only means of accurately recording what the inspector has actually observed. The recording of these comments is the final phase of a work activity. For inspection activities, it is a critical phase in the overall scheme of data collection and processing. An inspection report must include factual and meaningful comments or it has little value other than to be a record that an inspection was accomplished. Particular attention should be given to the identification of who or what was observed or evaluated, what specific function was being accomplished, when and where it occurred, and how and why it happened, as appropriate. Recorded comments should be as brief and concise as possible. Inspectors should use abbreviations and contractions when it is known that the contractions will be understood by aviation-oriented personnel. Essential information (such as dates, names of personnel, aircraft make/model/series, registrations numbers, part numbers, and flight numbers) that is recorded in first block of the checklist/report form should not be repeated in the comments. Inspectors should not, however, exclude essential information to make a comment brief, since there is no limit to the number of words that can be used to record a comment. Comments should fully describe and support the inspector's observations, evaluations, and opinions.

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