



**Republic of the Philippines**

**CIVIL AVIATION REGULATIONS (CAR)**

**PART 9**

**AIR OPERATOR CERTIFICATION AND  
ADMINISTRATION**

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Republic of the Philippines  
 Department of Transportation and Communications  
**CIVIL AVIATION AUTHORITY OF THE PHILIPPINES**  
 1300 MIA Road, Pasay City, Metro Manila  
 www.caap.gov.ph

**BOARD RESOLUTION NO. 2011-025**

**WHEREAS**, the Civil Aviation Authority of the Philippines (CAAP) was created by virtue of Republic Act 9497 which took effect on 23 March 2008;

**WHEREAS**, under Section 23, paragraph (j) of the same law, the Board is empowered to promulgate rules and regulations as may be necessary in the interest of safety in air commerce pertaining to the issuance of the airman's certificate including the licensing of operating and mechanical personnel, type certificate for aircraft, aircraft engines, propellers and appliances, airworthiness certificates, air carrier operating certificates, air agency certificates, navigation facility and aerodrome certificates; air traffic routes; radio and aeronautical telecommunications and air navigation aids; aircraft accident inquiries; aerodromes, both public and private-owned; construction of obstructions to aerodromes; height of buildings, antennae and other edifices; registration of aircraft; search and rescue; facilitation of air transports; operations of aircraft, both for domestic and international, including scheduled and non-scheduled; meteorology in relation to civil aviation; rules of the air; air traffic services; rules for prevention of collision of aircraft, identification of aircraft; rules for safe altitudes of flight; and such other rules and regulations, standards, governing other practices, methods and/or procedures as the Director General may find necessary and appropriate to provide adequately for safety regularity and efficiency in air commerce and air navigation;

**WHEREAS**, in the October 2009 ICAO-USOAP and 2010 EASA Audits, it was noted that portion of the Philippine Civil Aviation Regulations (PCAR) of 2008 is outdated and requires amendments/revisions;

**WHEREAS**, the CAAP Board of Directors, in its 03 March 2011 Board Meeting, approved the request of the Director General to initiate amendments and or revision of the Philippine Civil Aviation Regulations of 2008, subject to public consultations/hearings;

**WHEREAS**, the proposed PCARs cover the following regulatory/oversight functions:

- Part I General Policies, Procedures, Definitions
- Part II Personnel Licensing
- Part III Approved Training Organizations
- Part IV Aircraft Registration and Markings

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*[Signature]*  
 AIDA S. ROMULO  
 Chief, Central Records  
 and Archives Division



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05-27-2011

**AIDA S. ROMULO**  
Chief, Central Records  
and Archives Division

- Part V Airworthiness
- Part VI Approved Maintenance Organizations
- Part VII Instruments and Organization
- Part VIII Operations
- Part IX Air Operator Certification and Administration
- Part X Commercial Air Transport by Foreign Air Carriers within Republic of the Philippines
- Part XI Aerial Work and Non-certificated Aircraft: Operating Limitations

**WHEREAS**, the Board finds the 2011 Revised Philippine Civil Aviation Regulation (PCAR) sufficient in form and substance, and fully comply with the standards set forth by FAA/ICAO/EASA;

**WHEREFORE, RESOLVE**, as it is hereby **RESOLVED**, that the 2011 Revised Philippine Civil Aviation Regulations Parts I to XI be **APPROVED**, and shall be valid and effective upon completion of the requisite publication and a copy filed with the University of the Philippines Law Center-Office of the National Administrative Register (UP-ONAR);

**RESOLVED** further that the Director General shall fully implement the approved, 2011 Revised PCAR Parts I to XI with the accompanying information campaign to the Philippine civil aviation industry.

Adopted this 11<sup>th</sup> day of April 2011 at the Department of Transportation and Communications, Columbia Tower, Mandaluyong City.

**HON. JOSE P. DE JESUS**  
Chairman/Secretary, DOTC

*[Handwritten Signature]*

**HON. RAMON S. GUTIERREZ**  
Vice-Chairman/Director General, CAAP

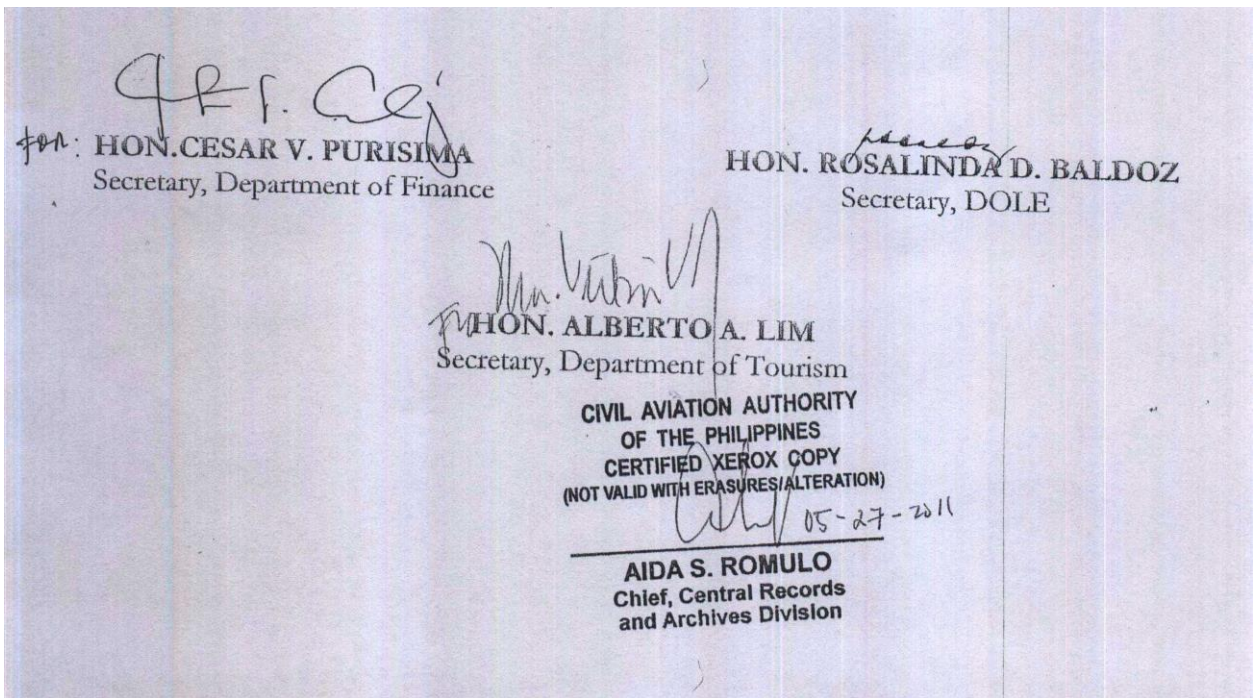
**HON. LEILA M. DE LIMA**  
Secretary, Department of Justice

*[Handwritten Signature]*

**HON. ALBERT F. DEL ROSARIO**  
Secretary, Department of Foreign Affairs

**HON. JESSE M. ROBREDO**  
Secretary, DILG





## RECORD OF AMENDMENTS

<b>Amendment No.</b>	<b>Date</b>	<b>Subject</b>	<b>Incorporated By</b>
Initial Issue	23 June 2008		Ruben F. Ciron
First Amendment	21 March 2011	<ol style="list-style-type: none"> <li>1) Definition <ul style="list-style-type: none"> <li>• Lease</li> <li>• Lease (Wet)</li> <li>• Lease (Damp or Moist)</li> <li>• Lease (Dry)</li> </ul> </li> <li>2) Compliance with an air Operator Certificate (letter (d) an AOC holder)</li> <li>3) 9.1.1.8 Duration of an air operator certificate</li> <li>4) 9.1.1.10 (4) Access for Inspector</li> <li>5) 9.1.1.13 Authority oversight function over AOC holder</li> <li>6) 9.1.1.14 Renewal of an air operator certificate</li> <li>7) 9.2.2.2 Management personnel required for commercial air transport operations (paragraph (b) number (2))</li> <li>8) 9.3.1.7 Required Cabin Crews (letter (a) and (d))</li> <li>9) IS: 9.2.2.2 Management personnel required for commercial air transport operations (letter (d) Crew Training)</li> <li>10) IS: 9.3.1.2 Operations Manual (letter (d) 12.0 Rules of the Air (c))</li> </ol>	Ramon S. Gutierrez
Second Amendment	01 August 2013	Inclusion of vertical bars on the previous amendments.	LT GEN William K Hotchkiss III AFP (Ret)
Third Amendment	31 October 2013	<ol style="list-style-type: none"> <li>1) 9.3.1.2 Operations Manual (b) (1) (2) (3) and (4)</li> <li>2) IS: 9.3.1.2 Operations Manual (a) (1) (2) (3) and (4), (19), (20), (21), (22) (i) (ii), (23), <ul style="list-style-type: none"> <li>• 8.1.5 Determination of the quantities of fuel, oil and water methanol carried</li> <li>• 8.1.8 Flight and duty</li> </ul> </li> </ol>	LT GEN William K Hotchkiss III AFP (Ret)

		<p>time</p> <ul style="list-style-type: none"> <li>• 8.3.1 Navigation Procedures (d)</li> </ul> <p>3) IS: 9.3.1.4 Aircraft Operating Manual</p> <ul style="list-style-type: none"> <li>• 12.1 Instructions and information (l) and (m)</li> </ul>	
Fourth Amendment	28 January 2014	<p>1) 9.2.2.2 Management personnel required for commercial air transport operations</p> <p>2) IS: 9.2.2.2 Management personnel required for commercial air transport operations</p>	LT GEN William K Hotchkiss III AFP (Ret)
Fifth Amendment	15 May 2012	1) IS: 9.2.3.4 Wet Leasing	LT GEN William K Hotchkiss III AFP (Ret)
Sixth Amendment	15 July 2015	1) 9.5.1.8 Security of flight crew compartment. (c) (3)	LT GEN William K Hotchkiss III AFP (Ret)
Seventh Amendment	06 November 2015	1) 9.5.1.8 Security of flight crew compartment. (c) (3) Cancelled the word "Flight"	LT GEN William K Hotchkiss III AFP (Ret)
Eighth Amendment	01 July 2017	<p>1) IS: 9.3.1.2 Operations Manual (d), 8.3 Flight Procedures, 8.3.1 Navigations Procedures (e)</p> <p>2) IS: 9.1.1.7 Air Operator Certificate (AOC) and Associated Operations Specifications (c) (10)</p> <p>3) 9.1.1.4 Compliance with an Air Operator Certificate (b)</p> <p>4) 9.1.1.7 Contents of Air Operator Certificate (b) and (c)</p> <p>5) IS: 9.1.1.7 Air Operator Certificate (AOC) and Associated Operations Specifications #12 and #19</p> <p>6) 9.3.1.2 Operations Manual (b) and (h)</p> <p>7) IS: 9.3.1.2 Operations Manual, 1.2.2 Flight Training Program</p>	Captain Jim C. Sydiongco

Ninth Amendment	07 September 2018	1) 9.1.1.6 Issuance or Denial of Air Operator Certificate (a) (4) and (b) (3)	Captain Jim C. Sydiongco
Tenth Amendment	28 December 2018	1) 9.1.1.8 Duration of an Air Operator Certificate (a)	Captain Jim C. Sydiongco
Eleventh Amendment	22 January 2019	1) 9.1.1.6 Issuance or Denial of Air Operator Certificate (a) (4)	Captain Jim C. Sydiongco
Twelfth Amendment	09 June 2020	1) 9.1.1.14 Renewal of An Air Operator Certificate 2) 9.2.2.2 Management Personnel Required for Commercial Air Transport Operations (c)	Captain Jim C. Sydiongco
Thirteenth Amendment	22 October 2021	1) 9.1.1.6 Issuance or Denial of Air Operator Certificate (a) (4) (iv)	Captain Jim C. Sydiongco
Fourteenth Amendment	04 January 2022	1) 9.1.1.2 Definitions (Removed and transferred to PCAR Part 1 Appendix A: Definitions)	Captain Jim C. Sydiongco
Fifteenth Amendment	09 February 2022	1) 9.7.1.2 Safety Management (h), (i) and (j)	Captain Jim C. Sydiongco
Sixteenth Amendment	29 August 2023	1) IS: 9.1.1.7 Air Operator Certificate (AOC) and Associated Operations Specifications (c) (12) 2) IS: 9.3.1.2 Operations Manual, 8.3.1 Navigation Procedures (d) 3) IS: 9.3.1.4 Aircraft Operating Manual, 12.1 Instructions and Information (m)	Captain Manuel Antonio L. Tamayo



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**9.1 AIR OPERATOR CERTIFICATE****9.1.1.1 APPLICABILITY**

- (a) Part 9 applies to the carriage of passengers, cargo or mail for remuneration or hire by persons whose principal place of business or permanent residence is located in Republic of the Philippines.
- (b) This Part of the regulations prescribes requirements for the original certification and continued validity of air operator certificates (AOC) issued by Republic of the Philippines.
- (c) Except where specifically noted, Part 9 applies to all commercial air transport operations by AOC holders for which Republic of the Philippines is the State of the Operator under the definitions provided in Annex 6 to the Convention on International Civil Aviation.
- (d) Republic of the Philippines shall recognize as valid an AOC issued by another Contracting State, provided that the requirements under which the certificate was issued are at least equal to the applicable Standards specified in these Civil Aviation Regulations.

**9.1.1.2 RESERVED**



**9.1.1.3 ABBREVIATIONS**

- (a) The following abbreviations are used in Part 9
- (1) AOC – Air Operator Certificate
  - (2) AMO – Approved Maintenance Organization
  - (3) ATP – Air Transport Pilot
  - (4) CAT – Commercial Air Transport or approach Category
  - (5) CDL – Configuration Deviation List
  - (6) FAA – Federal Aviation Administration (U.S.A.)
  - (7) IFR – Instrument Flight Rules
  - (8) IMC – Instrument Meteorological Conditions
  - (9) JAA – Joint Aviation Authorities
  - (10) MEL – Minimum Equipment List
  - (11) PBN – Performance-based Navigation
  - (12) PIC – Pilot-In-Command
  - (13) RNAV – Area Navigation
  - (14) SMS – Safety Management System
  - (15) UN – United Nations
  - (16) VFR – Visual Flight Rules
  - (17) VMC – Visual Meteorological Conditions

**9.1.1.4 COMPLIANCE WITH AN AIR OPERATOR CERTIFICATE**

- (a) An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate (AOC) issued by the State of Operator.
- (b) An operator shall develop policies and procedures for third parties that perform work on its behalf.

*Note: Provisions for the content of the AOC and its associated operations specifications are contained in Subpart 9.1.1.7 and IS: 9.1.1.7.*

- (c) Each AOC holder shall, at all times, continue in compliance with the AOC terms, conditions of issuance, and maintenance requirements in order to hold that certificate.
- (d) An AOC holder shall immediately notify CAAP if there is any change, (or contemplated change) to the terms, conditions of issuance, or maintenance requirements related to their certificate.

*Note: Failure to comply may result in the revocation or suspension of the AOC.*

**9.1.1.5 APPLICATION FOR AN AIR OPERATOR CERTIFICATE**

- (a) An operator applying to the Authority for an AOC shall submit an application:
  - (1) In a form and manner prescribed by the Authority; and
  - (2) Containing any information the Authority requires the applicant to submit.
- (b) Each applicant shall make the application for an initial issue of an AOC at least 90 days before the date of intended operation, except the Operations Manual specified in Subpart 9.3.1.2 and Maintenance Control Manual specified in Subpart 9.4.1.4, which may be submitted later but not less than 60 days before the date of intended operation.
- (c) Each applicant shall provide required financial information in accordance with Subpart 9.1.1.12, as applicable, along with the application for the initial issue or renewal.

**9.1.1.6 ISSUANCE OR DENIAL OF AIR OPERATOR CERTIFICATE**

- (a) The Authority may issue an AOC if, after investigation, the Authority finds that the applicant:
  - (1) Is a citizen of the Republic of the Philippines;
  - (2) Has its principal place of business and its registered office, if any, located in Republic of the Philippines;
  - (3) Meets the applicable regulations and standards for the holder of an AOC;
  - (4) Has at least three (3) aircraft, one (1) of which must be owned by the applicant. The aircraft ownership requirement does not apply to existing AOC holder that meets one of the following:
    - (i) Owned at least one (1) aircraft for a period of one (1) year from the issuance of the original Air Operator Certificate;
    - (ii) Engaged in commercial air operations for ten (10) consecutive years from the issuance of the original Air Operator Certificate;
    - (iii) Currently leasing at least five (5) Philippine-registered aircraft; or
    - (iv) Has a paid-up Capital of at least:
      - For International Air Operators:
        - Scheduled Flights: Eight Hundred Million Pesos (P800,000,000.00)
        - Non-Scheduled Flights: One Hundred Fifty Million Pesos (P150,000,000.00)
      - For Domestic Air Operators:
        - Scheduled Flights: Three Hundred Million Pesos (P300,000,000.00)
        - Non-Scheduled: Twenty-Five Million Pesos (P25,000,000.00) for Air Taxi
  - (5) Is properly and adequately equipped for safe operations in commercial air transport and maintenance of the aircraft; and
  - (6) Holds the economic authority issued by the Republic of the Philippines under the provisions of the Civil Aviation Law.
- (b) The Authority may deny application for an AOC if the Authority finds that:
  - (1) The applicant is not properly or adequately equipped or is not able to conduct safe operations in commercial air transport;

- (2) The applicant previously held an AOC which was revoked;
  - (3) The applicant fails to comply with the required number of aircraft; or
  - (4) An individual that contributed to the circumstances causing the revocation process of an AOC obtains a substantial ownership or is employed in a position required by this regulation.
- (c) The issue of an AOC by the Authority shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training program as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.
- (d) The continued validity of an AOC or equivalent document shall depend upon the operator maintaining the requirements of paragraph (c) above under the supervision of the Authority.

#### 9.1.1.7 CONTENTS OF AIR OPERATOR CERTIFICATE

- (a) The AOC will consist of two documents
- (1) A one-page certificate for public display signed by the Authority, and
  - (2) Operations specifications containing the terms and conditions applicable to the operator's certificate.
- (b) The AOC shall contain at least the following information and shall follow the layout prescribed in IS: 9.1.1.7:
- (1) The State of the Operator and issuing authority;
  - (2) The Air Operator Certificate number and expiration date;
  - (3) The operator name, trading name (if different) and address of the principal place of business;
  - (4) The date of issue and the name, signature and title of the authority representative; and
  - (5) The location, in a controlled document carried on board, where the contact details of operational management can be found.
- (c) The operations specifications associated with the AOC shall contain at least the information listed as under and shall follow the layout prescribed in IS: 9.1.1.7:
- (1) For each aircraft model in the operator's fleet, identified by aircraft make, model and series;
  - (2) The following list of authorizations, conditions and limitations shall be included:
    - (i) Issuing authority contact details;
    - (ii) Operator's name and AOC number;
    - (iii) Date of issue and signature of the authority representative;
    - (iv) Aircraft model and type;
    - (v) The authorized area of operations; and
    - (vi) Special limitations and authorizations.

*Note: If authorizations and limitations are identical for two or more models, these models may be grouped in a single list.*

- (d) Air operator certificates and their associated operations specifications first issued from 20 November 2008 shall follow the layouts prescribed in IS: 9.1.1.7.

*Note: The MEL constitutes an integral part of the Operations Manual.*

- (e) In addition to the above items, operations specifications may include other specific authorizations, such as:
- (1) Special airports operations (e.g.: short take-off and landing operations or land and hold short operations);
  - (2) Special approach procedures (e.g.: steep gradient approach, instrument landing system precision runway monitor approach, localizer type directional aid precision monitor approach, RNP approach, etc.)
  - (3) Single-engine passenger transport at night or in IMC; and
  - (4) Operations in areas with special procedures (e.g.: operations in areas using different altimetry units or altimeter setting procedures).

#### **9.1.1.8 DURATION OF AN AIR OPERATOR CERTIFICATE**

- (a) An AOC, or any portion of the AOC, issued by the Authority is effective for a period of five (5) years and remains valid until:
- (1) The Authority amends, suspends, revokes or otherwise terminates the certificate;
  - (2) The operator surrenders it to the Authority; or
  - (3) The operator suspends operations for more than 60 days.
  - (4) The operator makes changes (or proposes changes) to their organization which the Authority deems non-compliant with the terms, conditions of issuance or maintenance requirements of their certificate. An operator shall make application for renewal of an AOC at least 30 days before the end of the existing period of validity.

#### **9.1.1.9 AMENDMENT OF AN AIR OPERATOR CERTIFICATE**

- (a) The Authority may amend any AOC if:
- (1) The Authority determines that safety in commercial air transport and the public interest require the amendment; or
  - (2) The operator applies for an amendment, and the Authority determines that safety in commercial air transport and the public interest allows the amendment.
- (b) If the Authority stipulates in writing that an emergency exists requiring immediate amendment in the public interest with respect to safety in commercial air transportation, such an amendment is effective without stay on the date the operator receives notice.
- (c) An operator may appeal the amendment, but shall operate in accordance with it, unless it is subsequently withdrawn.
- (d) Amendments proposed by the Authority, other than emergency amendments, become effective 30 days after notice to the operator, unless the operator appeals the proposal in writing prior to the effective date. The filing of an appeal stays the effective date until the appeal process is completed.
- (e) Amendments proposed by the operator shall be made at least 30 days prior to the intended date of any operation under that amendment.

- (f) No person may perform a commercial air transport operation for which an AOC amendment is required, unless it has received notice of the approval from the Authority.

#### 9.1.1.10 ACCESS FOR INSPECTION

- (a) To determine continued compliance with the applicable regulations, the operator shall grant CAAP-authorized persons the right of unrestricted access to:
  - (1) Grant the Authority access to and co-operation with any of its organizations, facilities and aircraft;
  - (2) Ensure that the Authority is granted access to and co-operation with any organization or facilities that it has contracted for services associated with commercial air transport operations and maintenance for services; and
  - (3) Grant the Authority free and uninterrupted access to the flight deck of the aircraft during flight operations.
  - (4) Aviation documents, such as files, records, personnel licenses, certificates and manuals.
- (b) Each operator shall provide to the Authority a forward observer's seat on each of the AOC holder's aircraft from which the flight crew's actions and conversations may be easily observed.

*Note: The suitability of the seat location and the ability to monitor crewmember actions, conversations and radio communications is determined by the Authority.*

#### 9.1.1.11 CONDUCTING TESTS AND INSPECTIONS

- (a) The Authority will conduct on-going validation of the operator's continued eligibility to hold its AOC and associated approvals.
- (b) The operator shall allow the Authority to conduct tests and inspections, at any time or place, to determine whether an operator is complying with the applicable laws, regulations and AOC terms and conditions.
- (c) The operator shall make available at its principal base of operations:
  - (1) All portions of its current Air Operator Certificate;
  - (2) All portions of its Operations and Maintenance Manuals; and
  - (3) A current listing that includes the location and individual positions responsible for each record, document and report required to be kept by the AOC holder under the applicable aviation law, regulations or standards.
- (d) Failure by any operator to make available to the Authority upon request, all portions of the AOC, Operations and Maintenance Manuals and any required record, document or report is grounds for suspension of all or part of the AOC.

#### 9.1.1.12 FINANCIAL INFORMATION REQUIRED TO BE SUBMITTED WITH THE APPLICATION FOR AN AOC

- (a) General: Each financial statement containing financial information required as under must be based on accounts prepared and maintained on an accrual basis in accordance with generally accepted accounting principles applied on a consistent basis, and must contain the name and address of the applicant's public accounting firm, if any. Information submitted must be signed by an officer, owner, or partner of the applicant or certificate holder.



- (b) Financial information required for original issue or renewal of the AOC: Each applicant for the original issue or renewal of a scheduled or non-scheduled international or domestic AOC must submit the following financial information:
- (1) A balance sheet that shows assets, liabilities, and net worth, as of a date not more than 60 days before the date of application.
  - (2) In the case of an application for renewal, the most recent profit and loss statement required to be submitted under paragraph (c) below. Also, if the application for renewal is filed more than 60 days after the date of the applicant's most recent profit and loss statement submitted under paragraph (c) below, the applicant must submit a supplementary profit and loss statement covering the period from the date of the most recent statement to a date not more than 60 days before the date of application for renewal. The applicant shall submit a list of each contract that gave rise to operating income on the supplementary profit and loss statement, including the names and addresses of the contracting parties and the nature, scope, date, and duration of each contract.
  - (3) An itemization of liabilities more than 60 days past due on the balance sheet date, if any, showing each creditor's name and address, a description of the liability, and the amount and due date of the liability.
  - (4) An itemization of claims in litigation, if any, against the applicant as of the date of application showing each claimant's name and address and a description and the amount of the claim.
  - (5) In the case of an application for original issue, a detailed projection of the proposed operation covering 6 complete months after the month in which the certificate is expected to be issued including:
    - (i) Estimated amount and source of both operating and non-operating revenue, including identification of its existing and anticipated income producing contracts and estimated revenue per mile or hour of operation by aircraft type;
    - (ii) Estimated amount of operating and non-operating expenses by expense objective classification; and
    - (iii) Estimated net profit or loss for the period.
  - (6) An estimate of the cash that will be needed for the proposed operations during the first 6 months after the month in which the certificate is expected to be issued, including:
    - (i) Acquisition of property and equipment (explain);
    - (ii) Retirement of debt (explain);
    - (iii) Additional working capital (explain);
    - (iv) Operating losses other than depreciation and amortization (explain); and
    - (v) Other (explain).
  - (7) An estimate of the cash that will be available during the first 6 months after the month in which the certificate is expected to be issued, from-
    - (i) Sale of property or flight equipment (explain);
    - (ii) New debt (explain);
    - (iii) New equity (explain);
    - (iv) Working capital reduction (explain);
    - (v) Operations (profits)(explain);
    - (vi) Depreciation and amortization (explain); and

- (vii) Other (explain).
  - (8) A schedule of insurance coverage in effect on the balance sheet date showing insurance companies; policy numbers; types, amounts, and periods of coverage; and special conditions, exclusions, and limitations.
  - (9) Any other financial information that the Authority requires to enable it to determine that the applicant has sufficient financial resources to conduct his operations with the degree of safety required in the public interest.
- (c) **Periodic financial reports:** Each AOC holder shall submit a financial report for the first 6 months of each fiscal year and another financial report for each complete fiscal year. If an AOC is suspended for more than 29 days, the AOC holder shall submit a financial report as of the last day of the month in which the suspension is terminated. The report required to be submitted by this section shall be submitted within 60 days of the last day of the period covered by the report and must include:
- (1) A balance sheet that shows assets, liabilities, and net worth on the last day of the reporting period;
  - (2) The information required by paragraphs (b) (3), (8), and (9) above;
  - (3) An itemization of claims in litigation against the applicant, if any, as of the last day of the period covered by the report;
  - (4) A profit and loss statement with separation of items relating to applicant's commercial operator activities from his other business activities, if any; and
  - (5) A list of each contract that gave rise to operating income on the profit and loss statement, including the names and addresses of the contracting parties and the nature, scope, date, and duration of each contract.

#### **9.1.1.13 AUTHORITY OVERSIGHT FUNCTION OVER AOC HOLDERS**

- (a) To determine continued compliance with the applicable regulations, the Authority will conduct Audit and Surveillance programs.
- (b) To allow the Authority to determine continued compliance with applicable regulations through its Audit and Surveillance programs, the operator shall grant the Authority access to its operations, maintenance, facilities and related documentation in accordance with Subparts 9.1.1.10 and 9.1.1.11.

#### **9.1.1.14 RENEWAL OF AN AIR OPERATOR CERTIFICATE**

- (a) An operator shall make application for renewal of an AOC at least 60 days before the expiry date on the certificate. The application will:
  - (1) Be made in a form and manner prescribed by the Authority; and
  - (2) Contain the information as prescribed in the associated regulations and guidance materials.
- (b) Each applicant shall provide the required financial information in accordance with Subpart 9.1.1.12 as applicable, along with the application for renewal.
- (c) The Authority may deny application for the renewal of an AOC in accordance with the provisions of Subpart 9.1.1.6.

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**9.2 AIR OPERATOR CERTIFICATION AND CONTINUED VALIDITY****9.2.1.1 APPLICABILITY**

Subpart 9.2 provides requirements applicable to the certification and continued validity of all AOC holders.

**9.2.2 ADMINISTRATION****9.2.2.1 BASE OF OPERATIONS**

- (a) Each operator that is not authorized to conduct maintenance under its Air Operator Certificate shall maintain a principal base of operations.
- (b) Each operator that is authorized to conduct maintenance under its Air Operator Certificate shall maintain a principal base of operations and maintenance.
- (c) An operator may establish a main operations base and a main maintenance base at the same location or at separate locations.
- (d) Each operator shall provide written notification of intent to the Authority at least 30 days before it proposes to establish or change the location of either base.

**9.2.2.2 MANAGEMENT PERSONNEL REQUIRED FOR COMMERCIAL AIR TRANSPORT OPERATIONS**

- (a) Each operator shall have an accountable manager, acceptable to the Authority, who has corporate authority for ensuring that all flight operations and maintenance activities can be financed and carried out to the highest degree of safety standards required by the Authority.
- (b) When conducting commercial air transport operations, the operator shall have qualified personnel, with proven competency in civil aviation, available and serving in the following positions or their equivalent:
  - (1) Director of Operations
  - (2) Head of Training for Flight Crew
  - (3) Chief Pilot
  - (4) Director of Safety
  - (5) Director of Maintenance
  - (6) Quality Manager

*Note: "Competency in civil aviation" means that an individual shall have a technical qualification and management experience acceptable to the Authority for the position served.*
- (c) The Authority may approve a position or number of positions, other than those listed in paragraph (b) above, if the operator is able to show that it can perform the operation with the highest degree of safety under the direction of fewer or different categories of management personnel due to the:
  - (1) The kind of operations involved,
  - (2) The number of aircraft used; and
  - (3) The area of operation.
- (d) See IS: 9.2.2.2 for additional management personnel requirements.

- (e) The individuals who serve in the positions required or approved under this section and anyone in a position to exercise control over operations conducted under the AOC must:
  - (1) Be qualified through training, experience, and expertise;
  - (2) Discharge their duties to meet applicable legal requirements and to maintain safe operations; and
  - (3) To the extent of their responsibilities, have a full understanding of the following materials with respect of the operator's operation:
    - (i) Aviation safety standards and safe operating practices;
    - (ii) These Regulations;
    - (iii) The operator's operations specifications;
    - (iv) All appropriate maintenance and airworthiness requirements of this Part;
    - (v) The manuals requirements of this Part.
- (f) Each operator must:
  - (1) State in the general policy provisions of the operations manual the duties, responsibilities and authority of personnel required by this section;
  - (2) List in the operations manual the names and business addresses of the individuals assigned to those positions; and
  - (3) Notify the Authority within 10 days of any change in personnel or any vacancy in any position listed.

#### **9.2.2.3 QUALITY SYSTEM**

- (a) Each operator shall establish a quality system and designate a quality manager to monitor compliance with, and adequacy of, procedures required to ensure safe operational practices and airworthy aircraft. Compliance monitoring shall include a feedback system to the accountable manager to ensure corrective action as necessary.
- (b) Each operator shall ensure that each quality system includes a quality assurance program that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards and procedures.
- (c) The quality system, and the quality manager, shall be acceptable to the Authority.
- (d) Each operator shall describe the quality system in relevant documentation as outlined in IS: 9.2.2.3.
- (e) Notwithstanding (a) above, the Authority may accept the nomination of two Quality Managers, one for operations and one for maintenance, that shall report to the Accountable Manager, provided that the operator can ensure that the Quality System is applied uniformly throughout the entire operation.
- (f) Where the operator is also an AMO, the operator's quality management system may be combined with the requirements of an AMO and submitted for acceptance to the Authority, and State of Registry for aircraft not registered in Republic of the Philippines.

#### **9.2.2.4 SUBMISSION AND REVISION OF POLICY AND PROCEDURE MANUALS**

- (a) Each manual required by this part must:



- (1) Include instructions and information necessary to allow the personnel concerned to perform their duties and responsibilities with a high degree of safety,
  - (2) Be in a form that is easy to revise and contains a system which allows personnel to determine the current revision status of each manual:
  - (3) Have a date of the last revision on each page concerned;
  - (4) Not be contrary to any applicable Republic of the Philippines regulation and the operator's operations specifications; and
  - (5) Each manual will include a reference to appropriate civil aviation regulations.
- (b) No person may cause the use of any policy and procedure for flight operations or airworthiness function prior to co-ordination with the Authority.
- (c) Each operator shall submit the proposed policy or procedure to the Authority at least 30 days prior to the date of intended implementation. In an event of urgency of implementation, the operator may seek permission from the Authority, with justification, to reduce this period of 30 days.

#### **9.2.2.5 RETENTION AND MAINTENANCE OF PERSONNEL RECORDS**

- (a) Each operator shall retain the following records for the period specified in IS: 9.2.2.5:
- (1) Flight time and duty periods and rest periods records for all its crew members.
  - (2) Flight crew and cabin crew members' records.
  - (3) Other operator's personnel for which a training program is required.
  - (4) Fuel and oil records (to be retained by the operator for a period of three months).
  - (5) Maintenance records of the aircraft.
  - (6) Operational flight plan.
  - (7) Flight preparation forms listed below:
    - (i) Completed load manifests;
    - (ii) Mass and balance records;
    - (iii) Dispatch release;
    - (iv) Flight plans;
    - (v) Passenger manifests; and
    - (vi) Weather reports.
  - (8) Aircraft technical logbook, including the following sections listed below:
    - (i) Journey records section;
    - (ii) Maintenance records section.
  - (9) Flight recorders records.
  - (10) Quality system records.
  - (11) Dangerous goods transport document.
  - (12) Dangerous goods acceptance checklist.
  - (13) Records on cosmic and solar radiation dosage.
  - (14) Other records as required by the Authority.

- (b) For records identified in paragraph (a)(1), (2) and (3) above, the operator shall maintain:
  - (1) Current records which detail the qualifications and training of all its employees, and contract employees, involved in the operational control, flight operations, ground operations and maintenance of the air operator.
  - (2) Records for those employees performing crew member or flight operations officer duties in sufficient detail to determine whether the employee meets the experience and qualification for duties in commercial air transport operations.
- (c) Each operator shall maintain records in a manner acceptable to the Authority.
- (d) Each operator shall maintain current records which detail the qualifications and training of all its employees, and contract employees, involved in the operational control, flight operations, ground operations and maintenance of the air operator.
- (e) Each operator shall maintain records for those employees performing crew member or flight operations officer duties in sufficient detail to determine whether the employee meets the experience and qualification for duties in commercial air transport operations.

#### 9.2.2.6 COCKPIT VOICE AND FLIGHT DATA RECORDER RECORDS

- (a) Each AOC holder shall retain:
  - (1) The most recent flight data recorder calibration, including the recording medium from which this calibration is derived: and
  - (2) The flight data recorder correlation for one aircraft of any group of aircraft operated by the operator:
    - (i) That are of the same type;
    - (ii) On which the model flight recorder and its installation are the same; and
    - (iii) On which there is no difference in type design with respect to the original installation of instruments associated with the recorder.

*Note: The flight data recorder calibration and the flight data recorder correlation will be kept as part of the maintenance records for aircraft and its components.*
- (b) In the event of an accident or incident requiring immediate notification to the Authority, the operator shall remove and keep recorded information from the cockpit voice recorder and flight data recorder for at least 60 days or, if requested by the Authority, for a longer period.
- (c) The operator shall ensure, to the extent possible, the preservation of all related flight recorder records and, if necessary, the associated flight recorders (cockpit voice recorder and flight data recorder), and their retention in safe custody pending their disposition as determined in accordance with Annex 13.

#### 9.2.2.7 AIRCRAFT OPERATED BY THE AOC HOLDER

- (a) A current list of each aircraft operated by an operator shall be listed on its operations specifications. Each operator shall apply to the Authority an amendment to its operations specifications in advance of any intended change of aircraft.
- (b) Aircraft of another certificate holder operated under an interchange agreement shall be incorporated to the operations specifications as required by paragraph (a) above.

**9.2.2.8 AIRCRAFT TECHNICAL LOG**

- (a) Each operator shall have an aircraft technical log that is carried on the aircraft that contains a journey records section and an aircraft maintenance record section. The journey records section is further described in Subpart 9.3.1.5 and the aircraft maintenance record section is further described in Subpart 9.4.1.9.

*Note: The aircraft technical log may be computerized. The journey records section and the maintenance record section may be combined. See IS: 9.2.2.8 for two examples of an aircraft technical log entry.*

**9.2.2.9 COMPANY PROCEDURES INDOCTRINATION**

- (a) No person may serve nor may any operator use a person in any management, supervisory or technical function directly related to an aircraft operation, unless that person has completed the company indoctrination curriculum, approved by the Authority, to ensure that person's awareness of their appropriate duties and responsibilities and the relationship of such duties to the operation as a whole.
- (b) The indoctrination curriculum shall include training in knowledge and skills related to human performance, including co-ordination with other operator's personnel.
- (c) For the purposes of this Subpart, a person in any management, supervisory or technical function directly related to an aircraft operation includes any technical personnel performing functions as a flight crew member, cabin crew member, flight dispatch, maintenance, ground handling and operational administrative personnel.

*Note: Indoctrination, initial, recurrent, and other training required for crew members and flight operations officers/dispatchers is contained in Part 8.*

**9.2.2.10 FLIGHT SAFETY DOCUMENT SYSTEM**

- (a) An operator shall establish a flight safety document system, approved by the Authority, for the use and guidance of operational personnel.
- (b) The development and organization of the flight safety document system shall contain the minimum elements of the outline provided in IS: 9.2.2.10.

**9.2.3 AIRCRAFT****9.2.3.1 AUTHORIZED AIRCRAFT**

- (a) No person may operate an aircraft in commercial air transport unless that aircraft has an appropriate current airworthiness certificate, is in an airworthy condition, and meets the applicable airworthiness requirements for these operations, including those related to identification and equipment.
- (b) No person may operate any specific type of aircraft in commercial air transport until it has completed satisfactory initial certification, which includes the issuance of an AOC listing that type of aircraft.
- (c) No person may operate additional or replacement aircraft of a type for which it is currently authorized unless it can show that each aircraft has completed an evaluation process for inclusion in the operator's fleet.

- (d) No person may operate an aircraft in commercial air transport unless a Certificate of Public Convenience and Necessity (CPCN) or a Temporary Operating Permit (TOP) has been secured from the Civil Aeronautics Board (CAB).
- (e) No person may operate a leased aircraft in commercial air transport unless that lease-agreement has been approved by the Authority.

#### **9.2.3.2 DRY LEASING OF FOREIGN REGISTERED AIRCRAFT**

- (a) An operator may dry-lease a foreign-registered aircraft for commercial air transport as authorized by the Authority.
- (b) No person may be authorized to operate a foreign registered aircraft unless:
  - (1) There is in existence a current agreement between the Authority and the State of Registry that, while the aircraft is operated by Republic of the Philippines operator, the operations regulations of Republic of the Philippines are applicable:
  - (2) There is in existence a current agreement between the Authority and the State of Registry that:
    - (i) While the aircraft is operated by the AOC holder, the airworthiness regulations of the State of Registry are applicable: or
    - (ii) If the State of Registry agrees to transfer some or all of the responsibility for airworthiness to the Authority under Article 83-bis of the Chicago Convention, the airworthiness regulations of Republic of the Philippines shall apply to the extent agreed upon by the Authority and State of Registry.
  - (3) The agreement acknowledges that the Authority shall have free and uninterrupted access to the aircraft at any place and any time.
- (c) See IS: 9.2.3.2 for additional requirements for dry leasing of foreign-registered aircraft.

#### **9.2.3.3 AIRCRAFT INTERCHANGE**

- (a) No person may interchange aircraft with another operator without the approval of the Authority.
- (b) See IS: 9.2.3.3 for requirements pertaining to aircraft interchange agreements approved by the Authority.

#### **9.2.3.4 WET-LEASING**

- (a) No person may conduct wet-lease operations on behalf of another air operator except in accordance with the applicable laws and regulations of the country in which the operation occurs and the restrictions imposed by the Authority.
- (b) No person may allow another entity or air operator to conduct wet-lease operations on its behalf unless
  - (1) That air operator holds an AOC or its equivalent from a Contracting State that authorizes those operations: and
  - (2) The operator advises the Authority of such operations and provides a copy of the AOC under which the operation was conducted.
- (c) See IS: 9.2.3.4 for additional requirements when wet leasing aircraft.

**9.2.3.5 EMERGENCY EVACUATION DEMONSTRATION**

- (a) No person may use an aircraft type and model in commercial air transport passenger-carrying operations unless it has first conducted, for the Authority, an actual full capacity emergency evacuation demonstration for the configuration in 90 seconds or less.
- (b) The full capacity actual demonstration may not be required, if the operator provides a written petition for deviation with evidence that:
  - (1) A satisfactory full capacity emergency evacuation for the aircraft to be operated was demonstrated during the aircraft type certification or during the certification of another air operator; and
  - (2) There is an engineering analysis, which shows that an evacuation is still possible within the 90-second standard, if the operator's aircraft configuration differs with regard to number of exits or exit type or number of cabin crews or location of the cabin crews.
- (c) If a full capacity demonstration is not required, no person may use an aircraft type and model in commercial air transport passenger-carrying operations unless it has first demonstrated to the Authority that its available personnel, procedures and equipment could provide sufficient open exits for evacuation in 15 seconds or less. Each AOC holder shall conduct such a partial demonstration upon:
  - (1) Initial introduction of a type and model of aircraft into passenger-carrying operation.
  - (2) Changing the number, location, or emergency exits, or type of opening mechanism on emergency exits available of evacuation.
  - (3) Changing the number, location, or emergency evacuation duties or procedures of cabin crew members, as required by Subpart 9.3.1.7.
- (d) No person may use a land plane in extended overwater operations unless it has first demonstrated to the Authority that it has the ability and equipment to efficiently carry out its ditching procedures.
- (e) See IS: 9.2.3.5 for additional requirements concerning emergency evacuation demonstrations.

**9.2.3.6 DEMONSTRATION FLIGHTS**

- (a) No person may operate an aircraft type in commercial air transport unless it first conducts satisfactory demonstration flights for the Authority in that aircraft type.
- (b) No person may operate an aircraft in a designated special area, or using a specialized navigation system, unless it conducts a satisfactory demonstration flight for the Authority.
- (c) Demonstration flights required by paragraph (a) shall be conducted in accordance with the regulations applicable to the type of operation and aircraft type used.
- (d) The Authority may authorize deviations from this section if the Authority finds that special circumstances make full compliance with this section unnecessary.
- (e) See IS: 9.2.3.6 for additional requirements concerning demonstration flights.

**9.2.4 FACILITIES AND OPERATIONS SCHEDULE****9.2.4.1 FACILITIES**



- (a) Each operator shall maintain operational and airworthiness support facilities at the main operating base, appropriate for the area and type of operation.
- (b) Each operator shall arrange appropriate ground handling facilities at each airport used to ensure the safe servicing and loading of its flights.

**9.2.4.2 OPERATIONS SCHEDULES**

- (a) In establishing flight operations schedules, each operator conducting scheduled operations shall allow enough time for the proper servicing of aircraft at intermediate stops, and shall consider the prevailing winds en route and cruising speed for the type of aircraft. This cruising speed may not be more than that resulting from the specified cruising output of the engines.

### 9.3 AOC FLIGHT OPERATIONS MANAGEMENT

#### 9.3.1.1 APPLICABILITY

- (a) Subpart 9.3 provides those certification requirements that apply to management of flight operations personnel and their functions.

#### 9.3.1.2 OPERATIONS MANUAL

- (a) Each operator shall issue to the crew members and persons assigned operational control functions, an Operations Manual acceptable to the Authority.
- (b) An operations manual, which may be issued in separate parts corresponding to specific aspects of operations, provided in accordance with Subpart 9.3.1.2 shall be organized with the following structure:
  - (1) General;
  - (2) Aircraft operating information;
  - (3) Areas, routes and aerodromes; and
  - (4) Training.
- (c) Each operator shall prepare and keep current an Operations Manual that contains the operator's procedures and policies for the use and guidance of its personnel.
- (d) Each operator shall issue the Operations Manual, or pertinent portions, together with all amendments and revisions to all personnel that are required to use it. The Operations Manual shall be amended or revised as is necessary to ensure that the information contained therein is kept up to date. All such amendments or revisions shall be issued to all personnel that are required to use this manual.
- (e) No person may provide for use of its personnel in commercial air transport any Operations Manual, or portion of this manual, together with all amendments or revisions, which has not been reviewed and found acceptable or approved for the operator by the Authority. The operator shall incorporate in the Operations Manual such mandatory material as the Authority may require.
- (f) Each operator shall ensure that the contents of the Operations Manual includes, at least those subjects designated by the Authority that are applicable to the AOC holder's operations.
- (g) Unless otherwise acceptable to the Authority, each operator shall provide an Operations Manual containing information on operations administration and supervision, safety management programs, personnel training, flight crew and cabin crew flight duty period and rest period requirements, flight operations, operational flight planning including contents and use of operational flight plan, aircraft performance, routes, guides and charts, minimum flight altitudes, airport operating minima, search and rescue, dangerous goods, navigation, communications, security, and human factors. The operations manual shall encompass the matters set forth above. The operations manual may be published in parts, as a single document, or as a series of volumes. Specific subjects are listed below. Subjects presented with reference to a specific section shall be addressed in accordance with the requirements of the referenced section.
  - (1) Aircraft Operating Manual. (9.3.1.4)
  - (2) Minimum Equipment List and Configuration Deviation List. (9.3.1.12)
  - (3) Training Program. (9.3.1.3)

- (4) Aircraft Performance Planning Manual. (9.3.1.13)
  - (5) Route Guide. (9.3.1.20)
  - (6) Dangerous Goods Procedures.
  - (7) Accident Reporting Procedures.
  - (8) Security Procedures.
  - (9) Aircraft Loading and Handling Manual. (9.3.1.15)
  - (10) Cabin Crew Safety Manual. (9.3.1.17)
- (h) An operator shall develop policies and procedures for third parties that perform work on its behalf.

#### **9.3.1.3 TRAINING PROGRAM**

- (a) Each operator shall ensure that all operations personnel are properly instructed in their duties and responsibilities and the relationship of such duties to the operation as a whole.
- (b) Each operator shall have a training program manual approved by the Authority containing the general training, checking, and record keeping policies.
- (c) Each operator shall have approval of the Authority prior to using a training curriculum for the purpose of qualifying a crewmember, or person performing operational control functions, for duties in commercial air transport.
- (d) Each operator shall submit to the Authority any revision to an approved training program, and shall receive written approval from the Authority before that revision can be used.
- (e) The training program manual shall conform to the outline in IS 9.3.1.3.

#### **9.3.1.4 AIRCRAFT OPERATING MANUAL**

- (a) Each operator or applicant shall submit proposed aircraft operating manuals for each type and variant of aircraft operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft for approval by the Authority.
- (b) Each Aircraft Operating Manual shall be based upon the aircraft manufacturer's data for the specific aircraft type and variant operated by the operator and shall include specific operating parameters, details of the aircraft systems, and of the check lists to be used applicable to the operations of the operator that are approved by the Authority. The design of the manual shall observe Human Factors principles.
- (c) The Aircraft Operating Manual of each aircraft operated by the operator shall be issued to the flight crew members, persons assigned operational control functions and operations staff. The manual shall be easily accessible to the flight crew during all flight operations.
- (d) The Aircraft Operating Manual may conform to the outline contained in IS: 9.3.1.4.

**9.3.1.5 AIRCRAFT TECHNICAL LOG ENTRIES - JOURNEY RECORDS SECTION**

- (a) Each aircraft journey log book (technical log) shall contain the following items and corresponding Roman numerals for each flight: (See 9.4.1.9 for maintenance section of the aircraft technical log):
- (1) Aircraft nationality and registration;
  - (2) Date;
  - (3) Names of crewmembers;
  - (4) Duty assignments of crewmembers;
  - (5) Place of departure;
  - (6) Place of arrival;
  - (7) Time of departure;
  - (8) Time of arrival;
  - (9) Hours of flight;
  - (10) Nature of flight (private, aerial work, scheduled, or non-scheduled);
  - (11) Incidents, observations, if any; and
  - (12) Signature of person in charge.
- (b) Entries in the journey logbook shall be made currently and in ink or indelible pencil.
- (c) Completed journey log books shall be retained to provide a continuous record of the last six months operations.

**9.3.1.6 DESIGNATION OF PIC FOR COMMERCIAL AIR TRANSPORT**

- (a) The operator shall, for each commercial air transport operation, designate in writing one pilot as the PIC.

**9.3.1.7 REQUIRED CABIN CREWS**

- (a) An operator shall establish, to the satisfaction of the Authority, the minimum number of cabin crew required for each type of airplane, based on seating capacity only for commercial operations in order to effect a safe and expeditious evacuation of the airplane, and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. The operator shall assign these functions for each type of aircraft.
- (b) The operator shall schedule, and the PIC shall ensure that a minimum number of required cabin crew members are on board passenger-carrying flights.
- (c) The number of cabin crews may not be less than minimum prescribed, by the Authority in the operator's operations specifications or the following, whichever is greater:
- (1) For aircraft having type certificated seating capacity of more than 19 but less than 51 passengers: one cabin crew member;
  - (2) For aircraft having seating capacity of more than 50 but less than 101 passengers: two cabin crew members; and

- (3) For aircraft having seating capacity of more than 100 passengers: two cabin crew members plus one additional cabin crew member for each unit (or part of a unit) of 50 passenger seats above a seating capacity of 100 passengers.
- (d) In unforeseen circumstances in outstations, the required minimum number of cabin crew may be reduced provided that:
  - (1) the number of passengers has been reduced in accordance with the procedures specified in the Operations Manual; and
  - (2) a report is submitted to the Authority after completion of the flight.
- (e) When passengers are on board a parked aircraft, the minimum number of cabin crew members shall be one-half that required for the flight operation, but never less than one cabin crew (or another person qualified in the emergency evacuation procedures for the aircraft).

*Note: Where one-half would result in a fractional number, it is permissible to round off to the next whole number.*

#### **9.3.1.8 CARRIAGE OF SPECIAL SITUATION PASSENGERS**

- (a) No operator may allow the transportation of special situation passengers except
  - (1) As provided in the operator's Operations Manual procedures; and
  - (2) With the knowledge and concurrence of the PIC.

#### **9.3.1.9 CREW MEMBER CHECKING AND STANDARDIZATION PROGRAM**

- (a) Each operator shall have a program of checking and standardization of crew members approved by the Authority.
- (b) An operator shall check pilots' proficiency on those maneuvers and procedures that are prescribed by the Authority for pilot proficiency checks, which shall include emergency procedures and, where applicable, instrument flight rules.

*Note: A standardized process is defined to address the operator unique fleet differences and compliance methods.*

*Note: See Part 8 for specific checking requirements.*

#### **9.3.1.10 RESERVED**

#### **9.3.1.11 COCKPIT CHECK PROCEDURE**

- (a) The operator shall issue to the flight crews and make available on each aircraft, the flight deck condensed checklist procedures approved by the Authority appropriate to for the type and variant of aircraft.
- (b) The operator shall ensure that approved procedures include each item necessary for flight crew members to check for safety before starting engines, taking off, or landing, and for engine and systems abnormalities and emergencies.
- (c) The operator shall ensure that the checklist procedures are designed so that a flight crewmember will not need to rely upon their memory for items to be checked.
- (d) The operator shall make the approved procedures readily useable in the cockpit of each aircraft and the flight crew shall be required to follow them when operating the aircraft.



- (e) The operator shall include in the operations manual a minimum equipment list (MEL), approved by the Authority which will enable the PIC to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. Where the State of the Operator is not the State of Registry, the State of the Operator shall ensure that the MEL does not affect the aircraft's compliance with the airworthiness requirements applicable in the State of Registry.
- (f) The checklists provided in accordance with (e) above shall be used by flight crews prior to, during and after all phases of operations, and in emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual and the flight manual or other documents associated with the certificate of airworthiness and otherwise in the operations manual, are followed. The design and utilization of checklists shall observe Human Factors principles.

*Note: Checklists are part of the Aircraft Operating Manual, which is a part of the Operations Manual of the operator and is approved by the Authority.*

#### **9.3.1.12 MINIMUM EQUIPMENT LIST AND CONFIGURATION DEVIATION LIST**

- (a) Each operator shall provide for the use of the flight crew members, maintenance personnel and persons assigned operational control function during the performance of their duties, an MEL approved by the Authority.
- (b) The MEL shall be specific to the aircraft type and variant which contains the circumstances, limitations and procedures for release or continuance of flight of the aircraft with inoperative components, equipment or instruments.
- (c) Each operator may provide for the use of flight crew, maintenance personnel and persons assigned operational control functions during the performance of their duties a Configuration Deviation List (CDL) specific to the aircraft type if one is provided and approved by the State of Design. An operator's operations manual shall contain those procedures acceptable to the Authority for operations in accordance with the CDL requirements.

#### **9.3.1.13 PERFORMANCE PLANNING MANUAL**

- (a) Each operator shall provide for the use of the flight crewmembers and persons assigned operational control functions during the performance of their duties, a performance planning manual acceptable to the Authority.
- (b) The performance planning manual shall be specific to aircraft type and variant which contains adequate performance information to accurately calculate the performance in all normal phases of flight operation.

*Note: See ICAO Annex 6, Part I, Attachment C and ICAO Annex 6, Part III, Attachment A for guidance on preparing the performance planning manual.*

#### **9.3.1.14 PERFORMANCE DATA CONTROL SYSTEM**

- (a) The operator shall have a system approved by the Authority for obtaining, maintaining and distributing to appropriate personnel current performance data for each aircraft, route and airport that it uses.
- (b) The system approved by the Authority shall provide current obstacle data for departure and arrival performance calculations to comply with Subpart 8.7.2.4.

- (c) The operator shall take in to account of charting accuracy when ascertaining compliance with Subpart 8.7.2.4.
- (d) For helicopters: The operator shall use available obstacle data to develop procedures to comply with the take-off, initial climb, approach and landing phases detailed in the code of performance prescribed in Subpart 8.7.1.1.

#### **9.3.1.15 AIRCRAFT LOADING AND HANDLING MANUAL**

- (a) Each operator shall provide for the use of the flight crew members, ground handling personnel and persons assigned operational control functions during the performance of their duties, an aircraft handling and loading manual acceptable to the Authority.
- (b) This manual shall be specific to the aircraft type and variant which contains the procedures and limitations for servicing and loading of the aircraft.

*Note: Depending on the size and scope of the operator's operations, the aircraft loading and handling manual may be either a stand alone document or contained in the Aircraft Flight Manual.*

#### **9.3.1.16 MASS AND BALANCE DATA CONTROL SYSTEM**

- (a) Each operator shall have a system approved by the Authority for obtaining, maintaining and distributing to appropriate personnel current information regarding the mass and balance of each aircraft operated.

#### **9.3.1.17 CABIN CREW SAFETY MANUAL**

- (a) The operator shall issue to the cabin crew members and provide to passenger agents during the performance of their duties, a cabin crew safety manual acceptable to the Authority.
- (b) The cabin crew safety manual shall contain those operational policies and procedures applicable to cabin crew members and the carriage of passengers.
- (c) The operator shall issue to the cabin crew members, a cabin crew safety manual specific to the aircraft type and variant which contains the details of their normal, abnormal and emergency procedures and the location and operation of emergency equipment.

*Note: These manuals may be combined into one manual for use by the cabin crew members.*

#### **9.3.1.18 PASSENGER BRIEFING CARDS**

- (a) Each operator shall carry on each passenger carrying aircraft, in convenient locations for the use of each passenger, printed cards supplementing the oral briefing and containing
  - (1) Diagrams and methods of operating the emergency exits;
  - (2) Other instructions necessary for use of the emergency equipment, and
  - (3) Information regarding the restrictions and requirements associated with sitting in an exit seat row.
- (b) Each operator shall ensure that each card contains information that is pertinent only to the type and variant of aircraft used for that flight.

- (c) See IS: 9.3.1.18 for specific information to be included on passenger information cards regarding exit row seating.

*Note: See FAA AC 121-24C, Passenger Information Safety Briefing and Briefing Cards, for a detailed information on passenger briefings.*

#### **9.3.1.19 AERONAUTICAL DATA CONTROL SYSTEM**

- (a) Each operator shall have a system approved by the Authority for obtaining, maintaining and distributing to appropriate personnel current aeronautical data for each route and airport that it uses.
- (b) Each operator shall ensure that before release of a flight, subject to their published conditions of use, airports/heliports and their facilities are available for flight operations during their published hours of operations, irrespective of weather conditions.
- (c) See IS: 9.3.1.19 for the specific airport information to be contained in the aeronautical data control system.

#### **9.3.1.20 ROUTE GUIDE**

- (a) Each operator shall provide for the use of the flight crew members and persons assigned operational control functions during the performance of their duties, a route guide and aeronautical charts approved by the Authority.
- (b) The route guide and aeronautical charts shall be current and appropriate for the proposed types and areas of operations to be conducted by the operator.

#### **9.3.1.21 WEATHER REPORTING SOURCES**

- (a) Each operator shall use sources approved the Authority for the weather reports and forecasts used for decisions regarding flight preparation, routing and terminal operations.
- (b) For passenger carrying operations on a published schedule, the operator shall have an approved system for obtaining forecasts and reports of adverse weather phenomena that may affect safety of flight on each route to be flown and airport to be used.
- (c) See IS: 9.3.1.21 for sources of weather reports satisfactory for flight planning or controlling flight movement.

#### **9.3.1.22 DE-ICING AND ANTI-ICING PROGRAM**

- (a) Each operator planning to operate an aircraft in conditions where frost, ice, or snow may reasonably be expected to adhere to the aircraft shall:
  - (1) Use only aircraft adequately equipped for such conditions;
  - (2) Ensure flight crew is adequately trained for such conditions; and
  - (3) Have an approved ground deicing and anti-icing program.
- (b) See IS: 9.3.1.22 for detailed requirements pertaining to the AOC holder's deicing program.

*Note: See ICAO Doc 9649, Manual of Aircraft Ground Deicing/Anti-icing Operations. See also the current edition of FAA AC 120-60, Ground Deicing and Anti-Icing Program for a discussion of the program and training of employees.*

#### **9.3.1.23 FLIGHT SUPERVISION AND MONITORING SYSTEM**

- (a) For operations on a published schedule, each operator shall have an adequate system approved by the Authority for proper dispatch and monitoring of the progress of the scheduled flights.
- (b) The dispatch and monitoring system shall have enough dispatch centers, adequate for the operations to be conducted, located at points necessary to ensure adequate flight preparation, dispatch and in-flight contact with the scheduled flight operations.
- (c) For scheduled operations, each operator shall provide enough qualified flight operations officers at each dispatch centre to ensure proper operational control of each flight.
- (d) See IS: 9.3.1.23 for detailed requirements pertaining to the operator's flight monitoring system.

#### **9.3.1.24 RESERVED**

#### **9.3.1.25 COMMUNICATIONS FACILITIES**

- (a) Each operator's flights shall be able to have two-way radio communications with all ATC facilities along the routes and alternate routes to be used.
- (b) For passenger carrying operations on a published schedule, each operator shall be able to have rapid and reliable radio communications with all flights over the operator's entire route structure under normal operating conditions. This radio communication system shall be independent from the ATC system.
- (c) An operator engaged in international air navigation shall at all times have available for immediate communication to rescue coordination centers, lists containing information on the emergency and survival equipment carried on board any of their airplanes/helicopters including, as applicable:
  - (1) The number, colour and types of life rafts and pyrotechnics;
  - (2) Details of emergency water and medical supplies, water supplies; and
  - (3) The type and frequencies of the emergency portable radio equipment.

#### **9.3.1.26 ROUTES AND AREAS OF OPERATION**

- (a) An operator may conduct operations only along such routes and within such areas for which
  - (1) Ground facilities and services, including meteorological services, are provided which are adequate for the planned operation;
  - (2) The performance of the aircraft intended to be used is adequate to comply with minimum flight altitude requirements;
  - (3) The equipment of the aircraft intended to be used meets the minimum requirements for the planned operation;
  - (4) Appropriate and current maps and charts are available;

- (5) If two-engine aircraft are used, adequate airports are available with the time/distance limitations; and
  - (6) If single-engine aircraft are used, surfaces are available which permit a safe forced landing to be executed.
- (b) No person may conduct commercial air transport operations on any route or area of operation unless those operations are in accordance with any restrictions imposed by the Authority.
  - (c) The operator should issue operating instructions and provide information on airplane (or helicopter) climb performance with all engines operating to enable the PIC to determine the climb gradient that can be achieved during the take-off and initial climb phase for the existing take-off conditions and intended take-off technique. This information should be included in the operations manual. In case of helicopters this information should be based on the helicopter manufacturers or other data, acceptable to the Authority.

#### 9.3.1.27 NAVIGATIONAL ACCURACY

- (a) Each operator shall have, for each proposed route or area, that the navigational systems and facilities it uses capable of navigating the aircraft
  - (1) Within the degree of accuracy required for ATC; and
  - (2) To the airports in the operational flight plan within the degree of accuracy necessary for the operation involved.
- (b) In situations without adequate navigation systems reference, the Authority may authorize day VFR operations that can be conducted safely by pilotage because of the characteristics of the terrain.
- (c) Except for those navigational aids required for routes to alternate airports, the Authority will list in the operator's operations specifications non-visual ground aids required for approval of routes outside of controlled airspace.
- (d) Non-visual ground aids are not required for night VFR operations on routes that the certificate holder shows have reliably lighted landmarks adequate for safe operation.
- (e) Operations on route segments where the use of celestial or other specialized means of navigation shall be approved by the Authority.

*Note: See ICAO Doc 9613, Manual on Required Navigation Performance, for information on the approval process for operations in PBN airspace and a list of references to other documents produced by States and international bodies.*

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**9.4 AOC MAINTENANCE REQUIREMENTS****9.4.1.1 APPLICABILITY**

- (a) This Subpart provides those certification and maintenance requirements that apply to any AOC holder.

**9.4.1.2 MAINTENANCE RESPONSIBILITY**

- (a) Each operator shall ensure the airworthiness of the aircraft and the serviceability of both operational and emergency equipment by
- (1) Assuring the accomplishment of preflight inspections;
  - (2) Assuring the correction of any defect and/or damage affecting safe operation of an aircraft to an approved standard, taking into account the MEL and CDL if available for the aircraft type;
  - (3) Assuring the accomplishment of all maintenance in accordance with the approved operator's aircraft maintenance program:
  - (4) The analysis of the effectiveness of the operator's approved aircraft maintenance program;
  - (5) Assuring the accomplishment of any operational directive, airworthiness directive and any other continued airworthiness requirement made mandatory by the Authority; and
  - (6) Assuring the accomplishment of modifications in accordance with an approved standard and, for non-mandatory modifications, the establishment of an embodiment policy.
- (b) Each operator shall ensure that the Certificate of Airworthiness for each aircraft operated remains valid in respect to
- (1) The requirements in paragraph (a);
  - (2) The expiration date of the Certificate; and
  - (3) Any other maintenance condition specified in the Certificate.
- (c) Each operator shall ensure that the requirements specified in paragraph (a) are performed in accordance with procedures approved by or acceptable to the Authority.
- (d) Each operator shall ensure that the maintenance, preventive maintenance, and modification of its aircraft/aeronautical products are performed in accordance with its maintenance control manual and/or current instructions for continued airworthiness, and applicable aviation regulations.
- (e) Each operator while making any arrangement with another person or entity for the performance of any maintenance, preventive maintenance, or modifications, shall remain responsible of all work performed under such arrangement.

**9.4.1.3 RESERVED****9.4.1.4 MAINTENANCE CONTROL MANUAL**

- (a) The operator shall provide, for the use, implementation and guidance of maintenance and operational personnel concerned, a maintenance control manual, acceptable to the State of Registry, in accordance with the requirements of these CAR. The design of the manual shall observe Human Factors principles. The contents shall include:

- (1) The accountable manager and designated person(s) responsible for the maintenance system as required by Subpart 9.2.2.2.
- (2) Procedures to be followed to satisfy the maintenance responsibility of Subpart 9.4.1.2, and the quality functions of Subpart 9.2.2.3. Such procedures may be included in the AMO procedures manual.
- (3) Procedures for the reporting of failures, malfunctions, and defects in accordance with Subpart 5.5.1.4, to the Authority, State of Registry and the State of Design, within three (3) working days of discovery; in addition, items that warrant immediate notification to the Authority by telephone/telex/fax, with a written follow-on report as soon as possible but no later than within three (3) working days of discovery, are:
  - (i) Primary structural failure,
  - (ii) Control system failure,
  - (iii) Fire in the aircraft,
  - (iv) Engine structure failure, or
  - (v) Any other condition considered an imminent hazard to safety.

*Note: The service difficulty items not included in the list presented in Subpart 5.5.1.4, be reported on a daily basis.*

- (b) The AOC holder's maintenance control manual shall contain the following information which may be issued in separate parts
  - (1) A description of the administrative agreements between the AOC holder and the AMO containing a description of the maintenance procedures and the procedures for completing and signing a maintenance release;
  - (2) A description of the procedures to ensure each airplane they operate is in an airworthy condition;
  - (3) A description of the procedures to ensure the operational emergency equipment for each flight is serviceable;
  - (4) The names and duties of the person or persons required to ensure that all maintenance is carried out in accordance with the maintenance control manual;
  - (5) A reference to the maintenance program required in Subpart 9.4.1.11;
  - (6) A description of the methods for completion and retention of the operator's maintenance records required by Subpart 9.4.1.8;
  - (7) A description of the procedures for monitoring, assessing and reporting maintenance and operational experience for all aircraft over 5,700 kg maximum certificated take-off mass;
  - (8) A description of the procedures for obtaining and assessing continuing airworthiness information and implementing any resulting actions for all aircraft over 5,700 kg maximum certificated take-off mass, from the organization responsible for the type design, and shall implement such actions considered necessary by the State of Registry;
  - (9) A description of the procedures for implementing mandatory continuing airworthiness information as required in Subpart 9.4.1.2(a)(5);
  - (10) A description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance program in order to correct any deficiency in that program;

- (11) A description of aircraft types and models to which the manual applies;
  - (12) A description of procedures for ensuring that unserviceability's affecting airworthiness are recorded and rectified: and
  - (13) A description of the procedures for advising the State of Registry of significant in-service occurrences.
- (c) No person may provide for use of its personnel in commercial air transport any Maintenance Control Manual or portion of this manual which has not been reviewed and approved for the AOC holder by the Authority.
  - (d) The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained therein up to date.
  - (e) Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.
  - (f) The operator shall provide the State of the Operator and the State of Registry with a copy of the operator's maintenance control manual, together with all amendments and/or revisions to it and shall incorporate in it such mandatory material as the State of the Operator or the State of Registry may require.

*Note: See IS: 9.4.1.4 for an outline of specific subjects to be contained as appropriate in the operator's maintenance control manual.*

#### **9.4.1.5 MAINTENANCE MANAGEMENT**

- (a) The AOC holder and an AMO, as applicable, shall carry out the requirements specified in Subpart 9.4.1.2 (a) (2), (3), (5) and (6).
- (b) The AOC holder shall meet its responsibilities under in Subpart 9.4.1.2 (a)(2);(3);(5)and (6) by using:
  - (1) An arrangement with an AMO with a written maintenance contract agreed between the operator and the contracting AMO detailing the required maintenance functions and defining the support of the quality functions approved or accepted by the Authority.
- (c) Each operator shall employ a person or group of persons, acceptable to the Authority; to ensure that all maintenance is carried out to an approved standard such that the maintenance requirements of Subpart 9.4.1.2 and requirements of the AOC holder's maintenance control manual are satisfied; and to ensure the functioning of the quality system.
- (d) Each operator shall provide suitable office accommodation at appropriate locations for the personnel specified in paragraph (c).

#### **9.4.1.6 AIRCRAFT TECHNICAL LOG ENTRIES**

- (a) Each person who takes action in the case of a reported or observed failure or malfunction of an aircraft/aeronautical product that is critical to the safety of flight shall make; or have made; a record of that action in the maintenance section of the aircraft technical log.
- (b) Each operator shall have a procedure for keeping adequate copies of required records to be carried aboard, in a place readily accessible to each flight crewmember and shall put that procedure in the operator's operations manual.

**9.4.1.7 MAINTENANCE RECORDS**

- (a) Each operator shall ensure that a system has been established to keep, in a form acceptable to the Authority, the following records:
  - (1) The total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components;
  - (2) The current status of compliance with all mandatory continuing airworthiness information;
  - (3) Appropriate details of modifications and repairs to the aircraft and its major components;
  - (4) The time in service (hours, calendar time and cycles, as appropriate) since last overhaul of the aircraft or its components subject to mandatory overhaul life;
  - (5) The current aircraft status of compliance with the maintenance program; and
  - (6) The detailed maintenance records to show that all requirements for signing of a maintenance release and RTS have been met.
- (b) Each operator shall ensure that items in subparagraphs (a)(1) to (5) shall be kept for a minimum of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in subparagraph (a)(6) shall be kept for a minimum of 1 year after the signing of the maintenance release and/or RTS.
- (c) Each operator shall ensure that in the event of temporary change of operator, the records specified in paragraph (a) shall be made available to the new operator.
- (d) Each operator shall ensure that when an aircraft is permanently transferred from one operator to another operator, the records specified in paragraph (a) are also transferred.

**9.4.1.8 AIRCRAFT TECHNICAL LOG - MAINTENANCE RECORD SECTION**

- (a) Each operator shall use an aircraft technical log which includes an aircraft maintenance record section containing the following information for each aircraft: (See Subpart 9.3.1.5 for operations section of the aircraft technical log).
  - (1) Information about each previous flight necessary to ensure continued flight safety.
  - (2) The current aircraft maintenance release and/or an RTS.
  - (3) The current inspection status of the aircraft, to include inspections due to be performed on an established schedule and inspections that are due to be performed that are not on an established schedule, except that the Authority may agree to the maintenance statement being kept elsewhere.
  - (4) The current maintenance status of the aircraft, to include maintenance due to be performed on an established schedule and maintenance that is due to be performed that is not on an established schedule except that the Authority may agree to the maintenance statement being kept elsewhere.
  - (5) All deferred defects that affect the operation of the aircraft.

*Note: Defects which are not airworthiness items may be deferred to a later date for rectification. When this is done, there must be a method of recording such a deferral, and normally the airplane technical log has a section solely for this purpose. Some operators have a system of classifying deferred defects so as to allow different lengths of time, either in hours flown, number of sectors, or on return to a maintenance base, until a defect must be rectified before further flight.*

- (b) The aircraft technical log and any subsequent amendment shall be approved by the Authority.

#### **9.4.1.9 RETURN TO SERVICE (RTS)**

- (a) An operator shall not operate an aircraft unless it is maintained and returned to service by an organization approved in accordance with Part 6 or an organization, which shall be acceptable to the State of Registry.
- (b) The RTS can only be made after a maintenance release is issued by the appropriately certified and rated AMO in accordance with the AMO maintenance procedures manual and AOC maintenance control manual and, as applicable.
- (c) For aircraft registered in Republic of the Philippines, the AMO shall be approved by the Authority.
- (d) For aircraft registered in Republic of the Philippines, and operated outside of Philippines airspace the persons designated to sign a maintenance release or RTS shall be licensed in accordance with or under equivalent licensing requirements of Part 2 and the arrangement must be approved by the Authority.
- (e) For aircraft not registered in Republic of the Philippines, the AMO or an equivalent system of maintenance must be approved by the State of Registry of the aircraft, and such approval has to be acceptable to the Authority.
- (f) When that State of Registry accepts an equivalent system of maintenance, the persons designated to sign a maintenance release or RTS shall be licensed in accordance with or under equivalent licensing requirements of Part 2.
- (g) The operator shall give a copy of the maintenance release for the aircraft to the PIC, or ensure that an entry noting the release is made in the maintenance section of the aircraft technical log.

#### **9.4.1.10 MODIFICATION AND REPAIRS**

- (a) All modifications and repairs shall comply with airworthiness requirements of this CAR and acceptable to the authority and the State of Registry. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained. However, in the case of a major repair or major modification, the work must have been done in accordance with technical data approved by the Authority.
- (b) Each operator shall, promptly upon its completion, prepare a report of each major modification or major repair of an airframe, aircraft engine, propeller, or appliance of an aircraft operated by it.
- (c) The operator shall submit a copy of each report of a major modification to the Authority, and shall keep a copy of each report of a major repair available for inspection.

#### **9.4.1.11 OPERATOR'S MAINTENANCE PROGRAM**

- (a) Each operator's aircraft maintenance program and any subsequent amendment shall be submitted to the State of Registry for approval; acceptance by the Authority will be conditioned upon prior approval by the State of Registry, or where appropriate, upon the operator complying with recommendations provided by the State of Registry. The design and application of the operator's maintenance program shall observe Human Factors principles.

- (b) The Authority will require an operator to include a reliability program when the Authority determines that such a reliability program is necessary. When such a determination is made by the Authority the operator shall provide such procedures and information in the operator's maintenance control manual
- (c) Each operator shall ensure that each aircraft is maintained in accordance with the operator's aircraft approved maintenance program as required by Subpart 9.4.1.3, which shall include:
  - (1) Maintenance tasks and the intervals in which these are to be performed, taking into account the anticipated utilization of the aircraft:
  - (2) When applicable, a continuing structural integrity program,
  - (3) Procedures for changing or deviating from subparagraphs (c)(1) and (c)(2); and
  - (4) When applicable, condition monitoring and reliability program, descriptions for aircraft systems, components, and power-plants (for helicopters: power transmission and rotors).
- (d) Repetitive maintenance tasks that are specified in mandatory intervals as a condition of approval of the type design shall be identified as such.

*Note: The maintenance program should be based on maintenance program information made available by the State of Design or by the organization responsible for the type design, and any additional applicable experience.*
- (e) No person may provide for use of its personnel in commercial air transport a Maintenance Program or portion thereof which has not been reviewed and approved for the operator by the Authority.
- (f) The maintenance program shall be based on maintenance program information made available by the State of Design or by the organization responsible for the type design, and any additional applicable experience.
- (g) Approval by the Authority of an operator's maintenance program and any subsequent amendments shall be noted in the AOC certificate pursuant to Subpart 9.1.1.7(b) (6).
- (h) Each operator shall have an inspection program and a program covering other maintenance, preventive maintenance, and modifications to ensure that
  - (1) Maintenance, preventive maintenance, and modifications performed by it, or by other persons, are performed in accordance with the AOC holder's maintenance control manual,
  - (2) Each aircraft returned to service is airworthy and has been properly maintained for operation.
- (i) The Authority may amend any specifications issued to an operator to permit deviation from those provisions of this Subpart that would prevent the return to service and use of airframe components, power-plants, appliances, and spare parts thereof because those items have been maintained, altered, or inspected by persons employed outside Republic of the Philippines who do not hold a Republic of the Philippines technician's license. Each operator who is granted authority under this deviation shall provide for surveillance of facilities and practices to assure that all work performed on these parts is accomplished in accordance with the operator's maintenance control manual.
- (j) Copies of all amendments to the maintenance program shall be furnished promptly to all organizations or persons to whom the maintenance program has been issued.

**9.4.1.12 RESERVED**



**9.4.1.13 AUTHORITY TO PERFORM AND APPROVE MAINTENANCE PREVENTIVE MAINTENANCE AND MODIFICATIONS**

- (a) An operator shall make arrangements with an appropriately rated AMO for the performance of maintenance, preventive maintenance, or modifications of any aircraft, airframe, aircraft engine, propeller, appliance, or component, or part thereof as provided in the applicable aircraft maintenance program and operator's maintenance control manual.
- (b) An AMO may perform maintenance, preventive maintenance, or modifications on any aircraft, airframe, aircraft engine, propeller, appliance, or component, or a part thereof and certify a return to service, if approved in its specific operating provisions, as provided in the applicable aircraft maintenance program and operator's maintenance control manual.

**9.4.1.14 RESERVED****9.4.1.15 REST AND DUTY LIMITATIONS FOR PERSONS PERFORMING MAINTENANCE FUNCTIONS ON AOC HOLDER AIRCRAFT**

- (a) No person may assign, nor shall any person perform maintenance functions for aircraft certified for commercial air transport, unless that person has had a minimum rest period of 8 hours prior to the beginning of duty.
- (b) No person may schedule a person performing maintenance functions for aircraft Certified for commercial air transport for more than 12 consecutive hours of duty.
- (c) In situations involving unscheduled aircraft unserviceability, persons performing maintenance functions for aircraft certified for commercial air transport may be continued on duty for:
  - (1) Up to 16 consecutive hours; or
  - (2) 20 hours in 24 consecutive hours.
- (d) Following unscheduled duty periods, the person performing maintenance functions for aircraft shall have a mandatory rest period of 10 hours.
- (e) The operator shall relieve the person performing maintenance functions from all duties for 24 consecutive hours during any 7 consecutive day period.

**9.4.1.16 QUALITY SYSTEM**

- (a) For maintenance purposes, each operator's quality system required by Subpart 9.2.2.3 shall additionally include at least the following functions:
- (b) Monitoring that the activities of Subpart 9.4.1.2 are being performed in accordance with the accepted procedures;
- (c) Ensure that all contracted maintenance is carried out in accordance with the contract;
- (d) Monitoring the continued compliance with the requirements of Subpart 9.4; and each operator's quality system required by Subpart 9.2.2.3 shall include a quality assurance program that contains procedures designed to verify that all maintenance operations are being conducted in accordance with all applicable requirements, standards and procedures.
- (e) Where the AOC holder is also approved as an AMO, the operator's quality management system may be combined with the requirements of an AMO and

submitted for acceptance to the Authority, and State of Registry for aircraft not registered in Republic of the Philippines.

**9.4.1.17 SAFETY MANAGEMENT**

The operator shall implement the safety management requirements specified in Subpart 9.7 for the maintenance of its aircraft.

## 9.5 AOC SECURITY MANAGEMENT

### 9.5.1.1 APPLICABILITY

- (a) Subpart 9.5 provides those certification requirements that apply to the operator's protection of aircraft, facilities and personnel from illicit acts against civil aviation. The international standards set for in this subpart shall be applied also in case of domestic commercial operations (air services).
- (b) In the context of this subpart, word "Security" is used in the sense of prevention of illicit acts against of civil aviation.

### 9.5.1.2 SECURITY REQUIREMENTS

Each operator shall ensure that all appropriate personnel are familiar, and comply with, the relevant requirements of the national security programs of Republic of the Philippines.

### 9.5.1.3 SECURITY TRAINING PROGRAM

- (a) Each operator shall establish, maintain and conduct an approved security training program which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference.
- (b) As a minimum this program shall include the following elements:
  - (1) Determination of seriousness of any occurrence;
  - (2) Crew communication and coordination;
  - (3) Appropriate self-defense responses;
  - (4) Use of non-lethal protective devices assigned to crew members whose use is authorized by the Authority;
  - (5) Understanding of behavior of terrorists so as to facilitate the ability of crew members to cope with hijacker behavior and passenger responses;
  - (6) Live situational training exercises regarding various threat conditions;
  - (7) Flight deck procedures to protect the aircraft; and
  - (8) Aircraft search procedures and guidance with least risk bomb locations where practicable.
  - (9) Crew preventative measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aircraft.

*Note: If the operator is responsible for airport screening of passengers, baggage and cargo, then screening training must be included in the security training program.*

### 9.5.1.4 PREVENTIVE SECURITY TRAINING PROGRAM

- (a) Each operator shall also establish and maintain a preventive security training program to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aircraft so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.

**9.5.1.5 REPORTING ACTS OF UNLAWFUL INTERFERENCE**

- (a) Following an act of unlawful interference on board an aircraft the PIC or, in his absence, the operator shall submit, without delay, a report of such an act to the designated local authority, and to the Authority.

**9.5.1.6 AIRCRAFT SEARCH PROCEDURE CHECKLIST**

Each operator shall ensure that there is on board a checklist of the procedures to be followed for a bomb in case of a suspected sabotage and for inspecting aircraft for concealed weapons, explosives, or other dangerous devices when a well-founded suspicion exists that the aircraft may be the object of an act of unlawful interference. The checklist shall be supported by guidance on appropriate course of action to be taken should a bomb or suspicious object be found and information on the least-risk bomb location specific to the aircraft.

**9.5.1.7 MISCELLANEOUS**

- (a) Each operator should provide specialized means of attenuating and directing the blast for the use at the least-risk bomb location.
- (b) Where an operator accepts the carriage of weapons removed from the passengers, the aircraft shall have provision for stowing such weapons in a place so that they are inaccessible to any person during the flight time.

**9.5.1.8 SECURITY OF FLIGHT CREW COMPARTMENT**

- (a) In all aircraft which are equipped with a flight crew compartment door, this shall be capable of being locked, and means shall be provided by which cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin.
- (b) All passenger carrying airplanes with a mass of 45,000 kg or with a passenger seating capacity greater than 60 shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusion by unauthorized persons. This door shall be capable of being locked and unlocked from either pilot's station.
- (c) All airplanes which are equipped with a flight crew compartment door in accordance with paragraph (b) above:
- (1) This door shall be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons;
  - (2) Means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behavior or potential threat; and
  - (3) On aircraft certificated for two pilots operations, a crew member, preferably male but not necessarily a pilot, shall be required to be inside the flight deck should one of the pilots leave the flight deck for personal reasons.

- (d) All passenger-carrying airplanes should be equipped with an approved flight crew compartment door, where practicable, that is designed to resist penetration by small fire arms and grenade shrapnel and to resist forcible intrusions by unauthorized persons. This door should be capable of being locked and unlocked from either pilot's station.
- (e) In all airplanes which are equipped with a flight crew compartment door in accordance with paragraph (d) above:
  - (1) The door shall be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and
  - (2) Means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behavior or potential threat.

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**9.6 AOC DANGEROUS GOODS MANAGEMENT****9.6.1.1 APPLICABILITY**

- (a) Subpart 9.6 provides those certification requirements that apply to management of flight operations personnel and their functions.

**9.6.1.2 APPROVAL TO TRANSPORT DANGEROUS GOODS**

- (a) No operator may transport dangerous goods unless approved to do so by the Authority.

**9.6.1.3 SCOPE**

- (a) Each operator shall comply with the provisions contained in the ICAO Technical Instructions for the Safe Transport of Dangerous Goods By Air, ICAO Doc. 9284 (Technical Instructions) on all occasions when dangerous goods are carried, irrespective of whether the flight is wholly or partly within or wholly outside the territory of Republic of the Philippines. Where dangerous goods are to be transported outside the territory of Republic of the Philippines, the AOC holder shall review and comply with the appropriate variations noted by contracting states contained in Attachment 3 to the Technical Instructions.
- (b) Articles and substances which would otherwise be classed as dangerous goods are excluded from the provisions of Subpart 9.6, to the extent specified in the Technical Instructions, provided they are
- (1) Required to be aboard the aircraft for operating reasons;
  - (2) Carried as catering or cabin service supplies;
  - (3) Carried for use in flight as veterinary aid or as a humane killer for an animal; or
  - (4) Carried for use in flight for medical aid for a patient, provided that-
    - (i) Gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
    - (ii) Drugs, medicines and other medical matter are under the control of trained personnel during the time when they are in use in the aircraft;
    - (iii) Equipment containing wet cell batteries is kept and, when necessary secured, in an upright position to prevent spillage of the electrolyte; and
    - (iv) Proper provision is made to stow and secure all the equipment during take-off and landing and at all other times when deemed necessary by the PIC in the interests of safety; or
    - (v) They are carried by passengers or crewmembers.
- (c) Articles and substances intended as replacements for those in paragraph (b) (1) may be transported on an aircraft as specified in the Technical Instructions.

**9.6.1.4 LIMITATIONS ON THE TRANSPORT OF DANGEROUS GOODS**

- (a) Each operator shall take all reasonable measures to ensure that articles and substances that are specifically identified by name or generic description in the Technical Instructions as being forbidden for transport under any circumstances are not carried on any aircraft.

- (b) Each operator shall take all reasonable measures to ensure that articles and substances or other goods that are identified in the Technical Instructions as being forbidden for transport in normal circumstances or infected live animals are transported only when:
- (1) They are exempted by the States concerned under the provisions of the Technical Instructions; or
  - (2) The Technical Instructions indicate they may be transported under an approval issued by the State of Origin.

#### **9.6.1.5 CLASSIFICATION**

- (a) Each operator shall ensure that articles and substances are classified as dangerous goods as specified in the Technical Instructions.

#### **9.6.1.6 PACKING**

- (a) Each operator shall ensure that dangerous goods are packed as specified in the Technical Instructions.
- (b) Packing used for the transport of dangerous goods shall:
- (1) Be of good quality and shall be constructed and securely closed so as to prevent leakage which might be caused in normal conditions of transport, by changes in temperature, humidity or pressure, or by vibration.
  - (2) Be suitable for the contents. Packaging in direct contact with dangerous goods shall be resistant to any chemical or other action of such goods.
  - (3) Meet the material and construction specifications in the Technical Instructions.
  - (4) Be tested in accordance with the provisions of the Technical Instructions.
  - (5) For which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure stated in the Technical Instructions.
  - (6) For inner packaging, shall be so packed, secured or cushioned as to prevent their breakage or leakage and to control their movement within the outer packaging(s) during normal conditions of air transport. Cushioning and absorbent materials shall not react dangerously with the contents of the packaging.
  - (7) Not be reused until it has been inspected and found free from corrosion or other damage. Where packaging is re-used, all necessary measures shall be taken to prevent contamination of subsequent contents.
- (c) If because of the nature of their former contents, un-cleaned empty packaging may present a hazard, they shall be tightly closed and treated according to the hazard they constitute.
- (d) No harmful quantity of a dangerous substance shall adhere to the outside of packages.

#### **9.6.1.7 LABELING AND MARKING**

- (a) Each operator shall ensure that packages, over-packs and freight containers are labeled and marked as specified in the Technical Instructions.
- (b) Each operator shall ensure that packages, over-packs and freight containers are labeled and marked with:

- (1) The proper shipping name of its contents;
  - (2) The UN number, when assigned; and
  - (3) Other such markings as may be specified in the Technical Instructions.
- (c) Each operator shall ensure that packaging manufactured to a specification contained in the Technical Instructions shall be so marked in accordance with the Technical Instructions.
- (d) Where dangerous goods are carried on a flight which takes place wholly or partly outside the territory of Republic of the Philippines, the operator shall ensure that labeling and marking are in the English language in addition to any other language requirements.

#### **9.6.1.8 DANGEROUS GOODS TRANSPORT DOCUMENT**

- (a) Each operator shall ensure that, except when otherwise specified in the Technical Instructions, dangerous goods are accompanied by a dangerous goods transport document.
- (b) Where dangerous goods are carried on a flight which takes place wholly or partly outside the territory of a State, the AOC holder shall ensure that the English language is used for the dangerous goods transport document in addition to any other language requirements.

#### **9.6.1.9 ACCEPTANCE OF DANGEROUS GOODS**

- (a) No operator may accept dangerous goods for transport until the package, over-pack or freight container has been inspected in accordance with the acceptance procedures in the Technical Instructions.
- (b) Each operator, or its handling agent, shall use an acceptance check list which
- (1) Shall allow for all relevant details to be checked; and
  - (2) Shall be in such form as will allow for the recording of the results of the acceptance check by manual, mechanical or computerized means.

#### **9.6.1.10 INSPECTION FOR DAMAGE, LEAKAGE OR CONTAMINATION**

- (a) Each operator shall ensure that:
- (1) Packages; over-packs and freight containers are inspected for evidence of leakage or damage immediately prior to loading on an aircraft or into a unit load device, as specified in the Technical Instructions;
  - (2) A unit load device is not loaded on an aircraft unless it has been inspected as required by the Technical Instructions and found free from any evidence of leakage from, or damage to, the dangerous goods contained therein;
  - (3) Leaking or damaged packages, over-packs or freight containers are not loaded on an aircraft;
  - (4) Any package of dangerous goods found on an aircraft and which appears to be damaged or leaking is removed or arrangements made for its removal by an appropriate authority or organization.

- (5) After removal of any leaking or damaged goods, the remainder of the consignment is inspected to ensure it is in a proper condition for transport and that no damage or contamination has occurred to the aircraft or its load; and
- (6) Packages, over-packs and freight containers are inspected for signs of damage or leakage upon unloading from an aircraft or from a unit load device and, if there is evidence of damage or leakage, the area where the dangerous goods were stowed is inspected for damage or contamination.

#### 9.6.1.11 REMOVAL OF CONTAMINATION

- (a) Each operator shall ensure that
  - (1) Any contamination found as a result of the leakage or damage of dangerous goods is removed without delay: and
  - (2) An aircraft which has been contaminated by radioactive materials is immediately taken out of service and not returned until the radiation level at any accessible surface and the non-fixed contamination are not more than the values specified in the Technical Instructions.

#### 9.6.1.12 LOADING RESTRICTIONS AND STOWAGE OF DANGEROUS GOODS

- (a) Each operator shall ensure that packages and over-packs containing dangerous goods and freight containers containing radioactive materials are loaded and stowed in accordance with the Technical Instructions.
  - (1) *Passenger Cabin and Flight Deck.* Each operator shall ensure that dangerous goods are not carried in an aircraft cabin occupied by passengers or on the flight deck, unless otherwise specified in the Technical Instructions.
  - (2) *Cargo Compartments.* Each AOC holder shall ensure that dangerous goods are loaded, segregated, stowed and secured on an aircraft as specified in the Technical Instructions.
  - (3) *Dangerous Goods Designated for Carriage Only on Cargo Aircraft.* Each operator shall ensure that packages of dangerous goods bearing the "Cargo Aircraft Only" label are carried on a cargo aircraft and loaded as specified in the Technical Instructions, and in a manner that a crew member or other authorized person can see, handle and, where size and weight permit, separate such packages from other cargo in flight.
- (b) Packages containing dangerous goods shall be separated when stowing as follows:
  - (1) Those packages that might react dangerously with other packages shall not be stowed next to each other or in a position that might allow interaction between them in the event of a leakage.
  - (2) Those packages containing toxic and infectious substances shall be stowed in accordance with the Technical Instructions.
  - (3) Those packages containing radioactive materials shall be stowed so that they are separated from persons, live animals and undeveloped film, and secured in flight in accordance with the Technical Instructions.
- (c) The operator shall protect and secure any dangerous goods in such a manner that will prevent any movement in flight that might change the orientation of the packages.

**9.6.1.13 PROVISION OF INFORMATION**

- (a) *Information to Ground Staff.* Each operator shall ensure that:
- (1) Information is provided to enable ground staff to carry out their duties with regard to the transport of dangerous goods, including the actions to be taken in the event of incidents and accidents involving dangerous goods; and
  - (2) Where applicable, the information referred to in paragraph (a) (1) is also provided to the handling agent.
- (b) *Information to Passengers.* Each operator shall ensure that information is promulgated as required by the Technical Instructions so that passengers are warned as to the types of goods which they are forbidden from transporting aboard an aircraft.
- (c) *Information to Shippers.* Each operator shall ensure that information is promulgated as required by the Technical Instructions so that shippers of dangerous goods are provided with the information as required by the Technical Instructions to enable them to carry out their responsibilities with regard to the transport of dangerous goods and the action to be taken in the event of emergencies arising involving dangerous goods.
- (d) *Information to Acceptance Points Personnel.* Each operator and, where applicable, the handling agent shall ensure that notices are provided at acceptance points for cargo giving information about the transport of dangerous goods.
- (e) *Information to Crew Members.* Each operator shall ensure that information is provided in the Operations Manual to enable crew members to carry out their responsibilities in regard to the transport of dangerous goods, including the actions to be taken in the event of emergencies arising involving dangerous goods.
- (f) *Information to the PIC:* Each operator shall ensure that the PIC is provided with written information, as specified in the Technical Instructions.
- (g) *Information in the Event of an In-Flight Emergency.* If an in-flight emergency occurs, the PIC shall, as soon as the situation permits, inform the appropriate air traffic services unit, for the information of the aerodrome authorities, of any dangerous goods on board the aircraft, as provided for in the Technical Instructions.
- (h) *Information in the Event of an Aircraft Incident or Accident.* Each operator which is involved in an aircraft incident shall
- (1) As soon as possible, inform the appropriate authority of the State in which the aircraft accident occurred of any dangerous goods carried; and
  - (2) On request, provide any information required to minimize the hazards created by any dangerous goods carried.

**9.6.1.14 DANGEROUS GOODS TRAINING PROGRAM AND MANUAL**

- (a) Crew members, passenger handling staff, and security staff employed by the operator who deal with the screening of a passengers and their baggage and cargo shall have received training which covers as a minimum, the areas identified in Part 8 to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify them and what requirements apply to the carriage of such goods by passengers.
- (b) An operator shall provide dangerous goods training manuals which contain adequate procedures and information to assist personnel in identifying packages marked or labeled as containing hazardous materials including:
- (1) Instructions on the acceptance, handling, and carriage of hazardous materials.

- (2) Instructions governing the determination of proper shipping names and hazard classes.
- (3) Packaging, labeling, and marking requirements.
- (4) Requirements for shipping papers, compatibility requirements, loading, storage, and handling requirements.
- (5) Restrictions.

#### **9.6.1.15 DANGEROUS GOODS INCIDENT AND ACCIDENT REPORTS**

- (a) Each operator shall report dangerous goods incidents and accidents to the Authority within 72 hours of the event, unless exceptional circumstances prevent this.
- (b) Each operator shall report undeclared or mis-declared dangerous goods discovered in cargo or passenger's baggage to the Authority within 72 hours of the discovery, unless exceptional circumstances prevent this.

#### **9.6.1.16 SHIPPER'S RESPONSIBILITIES**

- (a) No person shall offer a package, over-pack or freight container containing dangerous goods for shipment by air unless that person has, in accordance with the Technical Instructions, ensured that the dangerous goods are properly:
  - (1) Classified;
  - (2) Packed;
  - (3) Labeled and
  - (4) Accompanied by a properly executed dangerous good transport document.
- (b) In completing the dangerous goods transport document for the operator, the shipper shall, in accordance with the Technical Instructions and any other regulations of Republic of the Philippines:
  - (1) Declare that the dangerous goods are fully and accurately described by their proper shipping names;
  - (2) Declare that the dangerous goods are classified, packed, marked and labeled and in the proper condition for transport;
  - (3) Complete the form in English; and
  - (4) Sign the form.

#### **9.6.1.17 DANGEROUS GOODS SECURITY PROVISIONS**

- (a) Each shipper, operator and other individuals engaged in the transport of dangerous goods by air shall establish security measures, consistent with these regulations, to minimize theft or misuse of dangerous goods that may endanger persons, property or the environment.



**9.7 SAFETY MANAGEMENT****9.7.1.1 APPLICABILITY**

Subpart 9.7 provides the requirements that apply to safety management related to flight operations and maintenance of aircraft.

**9.7.1.2 SAFETY MANAGEMENT**

- (a) Each operator of an aircraft and approved maintenance organization shall establish a safety program, in order to achieve an acceptable level of safety in the operation and maintenance of aircraft that shall be approved by the Authority.
- (b) The acceptable level of safety to be achieved shall be as prescribed by the Authority. [See IS: 9.7.1.2 (b) for guidance.]
- (c) From 1 January 2009, as part of their safety program, that an operator/approved maintenance organization implements a safety management system acceptable to the Authority that, as a minimum:
  - (1) identifies safety hazards;
  - (2) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;
  - (3) provides for continuous monitoring and regular assessment of the safety level achieved; and
  - (4) aims to make continuous improvement to the overall level of safety.
- (d) A safety management system shall clearly define lines of safety accountability throughout the organization of operator/approved maintenance organization, including a direct accountability for safety on the part of senior management.
- (e) An operator/approved maintenance organization shall establish a flight safety documents system, for the use and guidance of operational and maintenance personnel, as part of its safety management system. (See IS: 9.2.2.10).
- (f) An operator of an airplane of a certificated take-off mass in excess of 20,000 kg (and a helicopter of a certificated take-off mass in excess of 7,000 kg or having a passenger seating configuration of more than 9 and fitted with flight data recorder) should establish and maintain a flight data analysis program as part of its safety management system.
- (g) An operator of an airplane of a maximum certificated take-off mass in excess of 27,000 kg shall establish and maintain a flight data analysis program as part of its safety management system.
- (h) A flight data analysis program shall contain adequate safeguards to protect the source(s) of the data.

*Note: Guidance on safety management system is contained in ICAO Doc 9859, ICAO Safety Management Manual.*

*Implementing Standards: IS 9.7.1.2 (a) Safety Management System IS 9.7.1.2 (b) Acceptable Level of Safety*
- (i) No person shall allow the use of recordings or transcripts of CVR, CARS, Class A AIR and Class A AIRS for purposes other than the investigation of an accident or incident as per PCAR Part 13 except where the recordings or transcripts:

- (1) are related to a safety-related event identified in the context of a safety management system; are restricted to the relevant portions of a de-identified transcript of the recording; and are subject to the protections accorded by CAR-SM;
- (2) are sought for use in criminal proceedings not related to an event involving an accident or incident investigation and are subject to the protections accorded by CAR-SM; or
- (3) are used for inspections of flight recorder systems as provided in Section 7, Appendix 8 of ICAO Annex 6 Part I.

*Note. – Provisions on the protection of safety data, safety information and related sources are contained in Appendix 3 of ICAO Annex 19. When an investigation under PCAR Part 13 is instituted, investigation records are subject to the protections accorded by PCAR Part 13.*

- (j) No person shall allow the use of recordings or transcripts of FDR, ADRS as well as Class B and Class C AIR and AIRS for purposes other than the investigation of an accident or incident as per PCAR Part 13, except where the recordings or transcripts are subject to the protections accorded by CAR-SM and:
  - (1) are used by the operator for airworthiness or maintenance purposes;
  - (2) are used by the operator in the operation of a flight data analysis program required in this Part;
  - (3) are sought for use in proceedings not related to an event involving an accident or incident investigation;
  - (4) are de-identified; or
  - (5) are disclosed under secure procedures.

*Note. – Provisions on the protection of safety data, safety information and related sources are contained in Appendix 3 of ICAO Annex 19.*

**Republic of the Philippines**

**CIVIL AVIATION REGULATIONS (CAR)**

**PART 9: IS**

**AIR OPERATOR CERTIFICATION AND ADMINISTRATION:**

**IMPLEMENTING STANDARDS**

28 January 2014

For ease of reference, the number assigned to each implementing standard corresponds to its associated regulation. For example, IS: 9.2.2.2 would reflect a standard required in CAR: 9.2.2.2.

**IS: 9.1.1.7 AIR OPERATOR CERTIFICATE (AOC) AND ASSOCIATED OPERATIONS SPECIFICATIONS**

(a) General:

- (1) The AOC and its associated aircraft model-specific operations specifications shall contain minimum information required in paragraph (c) below in standardized format.
- (2) The AOC and its associated operations specifications shall define the operations for which an operator is authorized.
- (3) Subpart 9.1.1.7 contains additional information that may be listed in the operations specifications associated with the AOC.

(b) A certified true copy of the AOC and operations specifications shall be carried aboard.

(c) The layout of AOC and operations specifications summary:

<b>AIR OPERATOR CERTIFICATE</b>		
<sup>3</sup>	<b>State of the Operator<sup>1</sup></b>	<sup>3</sup>
	<b>Issuing Authority<sup>2</sup></b>	
<b>AOC #<sup>4</sup>:</b>	<b>Operator Name<sup>6</sup></b>	<b>Operational Points of Contact:<sup>8</sup></b> Contact details, at which operational management can be contacted without undue delay, are listed in ..... <sup>11</sup> .
<b>Expiry Date<sup>5</sup>:</b>	<b>Db a Trading Name<sup>7</sup></b>	
	<b>Operator address<sup>9</sup>:</b>	
	<b>Telephone<sup>10</sup>:</b>	
	<b>Fax:</b>	
	<b>E-mail:</b>	
This certificate certifies that ..... <sup>12</sup> is authorized to perform commercial air operations, as defined in the attached operations specifications, in accordance with the Operations Manual and the ..... <sup>13</sup> .		
<b>Date of issue<sup>14</sup>:</b>	<b>Name and Signature<sup>15</sup>:</b>	
	<b>Title:</b>	

- (1) Name of the State of the Operator.
- (2) Identification of the issuing Authority of the State of the Operator.
- (3) For use of the State of the Operator.
- (4) Unique AOC number, as issued by the State of the Operator.
- (5) Date after which the AOC ceases being valid (dd-mm-yyyy).
- (6) The operator registered name.
- (7) Operator trading name, if different. Insert “Db a” before the trading name (for “Doing business as”).

- (8) The contact details include the telephone and fax numbers, including the country code, and the e-mail address (if available) at which operational management can be contacted without undue delay for issues related to flight operations, airworthiness, flight and cabin crew competency, dangerous goods and other matters as appropriate.
- (9) Operator principle place of business address.
- (10) Insertion of applicable instrument approach operation classified: Type B (Cat I, II, IIIA, IIIB or IIIC). Insertion of minimum RVR in meters and Decision Height in feet. One line is used per listed approach category.
- (11) Insertion of the controlled document, carried on board, on which the contact details are listed, with the appropriate paragraph or page reference, e.g.: "Contact details ..... are listed in the Operations Manual, Chapter 1, 1.1"; or "..... are listed in the Operations Specifications, page 1"; or " ..... are listed in an attachment to this document".
- (12) Operator registered name.
- (13) Insertion of reference to the appropriate Civil Aviation Regulations.
- (14) Issuance date of the AOC (dd-mm-yyyy).
- (15) Title, name and signature of the Authority representative. In addition, an official stamp may be applied to the AOC.

OPERATIONS SPECIFICATIONS ( subject to the approved conditions in the Operations Manual)				
Issuing Authority Contact Details.				
Telephone <sup>1</sup> :	;Fax:		;Email:	
AOC# <sup>2</sup> :	Operator Name <sup>3</sup> :	Date <sup>4</sup> :	Signature:	
Dba Trading Name				
Aircraft Model <sup>5</sup> :				
Types of operation: Commercial air transportation <input type="checkbox"/> Passengers <input type="checkbox"/> Cargo <input type="checkbox"/> Other <sup>6</sup> : .....				
Area of operation <sup>7</sup> :				
Special Limitations <sup>8</sup> :				
SPECIAL AUTHORIZATIONS	YES	NO	SPECIAL APPROVALS <sup>9</sup>	REMARKS
Dangerous goods	<input type="checkbox"/>	<input type="checkbox"/>		
Low visibility operations				
Approach and landing	<input type="checkbox"/>	<input type="checkbox"/>	CAT <sup>10</sup> : ___ RVR: ___ m    DH: _____ ft	
Take-off	<input type="checkbox"/>	<input type="checkbox"/>	RVR <sup>11</sup> : _____m	
Operational credits(s)	<input type="checkbox"/>	<input type="checkbox"/>	<sup>12</sup>	
RVSM- <sup>13</sup> <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>		
EDTO <sup>14</sup> <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	Threshold time <sup>15</sup> : _____ minutes  Maximum diversion time <sup>15</sup> : _____ minutes	
Navigation specifications for PBN operations <sup>16</sup>	<input type="checkbox"/>	<input type="checkbox"/>		<sup>17</sup>
Continuing airworthiness	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<sup>18</sup>	
EFB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<sup>19</sup>	
Other <sup>20</sup>	<input type="checkbox"/>	<input type="checkbox"/>		

- (1) Telephone and fax contact details of the Authority, including the country code, and the e-mail to be provided, if available.
- (2) Insertion of associated AOC number.
- (3) Insertion of operator registered name and the operator trading name, if different. Insert “Dba” before the trading name (for “Doing business as”).
- (4) Issuance date of the operations specifications (dd-mm-yyyy) and signature of the Authority representative.
- (5) Insertion of the Commercial Aviation safety Team (CAST)/ICAO designation of the aircraft make, model and series, or master series, if a series has been designated (e.g.: Boeing-737-3K2 or Boeing-777-232). The CAST/ICAO taxonomy is available at: <http://www.intlaviationstandards.org/>
- (6) Other types of transportation to be specified (e.g.: emergency medical service).
- (7) Listing of geographical area(s) of authorized operation (by geographical coordinates or specific routes, flight information region or national or international boundaries).
- (8) Listing of applicable special limitations (e.g.: VFR only, Day only, etc.).
- (9) List in this column the most permissive criteria for each approval or the approval type (with appropriate criteria).
- (10) Insertion of applicable precision approach category: Cat I, II, IIIA, IIIB or IIIC. Insertion of minimum RVR in meters and Decision Height in feet. One line is used per listed approach category.
- (11) Insertion of approval minimum take-off RVR in meters. One line per approval may be used if different approvals are granted.
- (12) List the airborne capabilities (e.g. automatic landing, HUD, EVS, SVS, CVS) and associated operational credit(s) granted.
- (13) Not applicable (N/A) box may be checked only if the aircraft maximum ceiling is below FL290.
- (14) Extended diversion time operations (EDTO) currently applies only to two power unit aircraft. Therefore not applicable (N/A) box may be checked if the aircraft model has more than two power units. Should the concept be extended to three or four power unit aircraft in the future, the Yes or No checkbox will be required to be checked.
- (15) The threshold distance may also be listed in (nm), as well as the power unit type.
- (16) Performance-based Navigation (PBN): one line is used for each PBN specifications authorization (e.g.: RNAV10, RNAV1, RNP4,.....), with appropriate limitations or conditions listed in the “Specific Approvals” and/or “Remarks” columns.
- (17) Limitations, conditions and regulatory basis for operational approval associated with the Performance-based Navigation specifications (e.g.: GNSS, DME/DME/IRU,.). Information on Performance-based Navigation, and guidance concerning the implementation and operational approval process, are contained in the Performance-based Navigation Manual (Doc 9613).



- (18) Insert the name of the person/organization, responsible for ensuring that the continuing airworthiness of the aircraft is maintained and the regulation which requires the work, i.e. within the AOC regulation or a specific approval (e.g. EC2042/2003, Part M, Subpart G).
- (19) List the EFB functions with any applicable limitations.
- (20) Other authorizations or data can be entered here, using one line (or one multi-line block) per authorization (e.g. special approach authorization, MNPS approved navigation performance, etc.).

*Note: Items 12, 13 and 14 are not applicable to helicopters.*

#### **IS: 9.2.2.2 MANAGEMENT PERSONNEL REQUIRED FOR COMMERCIAL AIR TRANSPORT OPERATIONS**

(a) General:

- (1) Each AOC holder shall make arrangements to ensure continuity of supervision if operations are conducted in the absence of any required management personnel.
- (2) Required management personnel shall be contracted to work sufficient hours such that the management functions are fulfilled.
- (3) A person serving in a required management position for an AOC holder may not serve in a similar position for any other AOC holder, unless a deviation is issued by the Authority.

(b) The minimum qualifications for a Director of Operations are:

- (1) Holds or has held an ATP license; and
- (2) 3 years experience as PIC in commercial air transport operations:
  - (i) Of large aircraft if the AOC holder operates large aircraft; or
  - (ii) Of either large or small aircraft if the AOC holder operates only small aircraft.

(c) The minimum qualifications for a Chief Pilot are:

- (1) An ATP license with the appropriate ratings for at least one of the aircraft used in the AOC holder's operations; and
- (2) 3 years experience as PIC in commercial air transport operations
  - (i) Of large aircraft if the AOC holder operates large aircraft; or
  - (ii) Of either large or small aircraft if the AOC holder operates only small aircraft.

*Note: The Authority may accept a commercial pilot license with instrument rating in lieu of the ATP license if the PIC requirements for the operations conducted require only a commercial pilot license.*

(d) Crew training:

- (1) For Head of Training for Flight Crew, the minimum qualification shall be in accordance of Subpart IS: 3.2.2.
- (2) Either the Chief Pilot or his deputy shall be a current Type Rating Instructor on a type/class operated under the AOC.

(e) The minimum entry qualifications for a Director of Maintenance are:

- (1) A relevant engineering degree or Aviation Maintenance Technician (AMT) license with airframe and powerplant ratings acceptable to the Authority.

- (2) 3 years experience in maintaining the same category and class of aircraft used by the AOC holder including 1 year in the capacity of returning aircraft to service.
- (3) Knowledge of relevant type(s) of aircraft.
- (4) Knowledge of maintenance methods.
- (5) Thorough familiarity with the AOC's Maintenance Control Manual.

*Note: "Relevant engineering degree" means an engineering degree from Aeronautical, Mechanical, Electrical, Electronic, Avionic or other studies relevant to the maintenance of aircraft/ aircraft components.*

- (f) The minimum entry qualifications for a Quality Manager are:
  - (1) A relevant engineering degree or Aviation Maintenance Technician (AMT) license with airframe and powerplant ratings acceptable to the Authority.
  - (2) 3 years experience in maintaining the same category and class of aircraft used by the AOC holder including 1 year in the capacity of returning aircraft to service.
- (g) The management personnel should have comprehensive knowledge of:
  - (1) These Regulations and associated requirements and procedures.
  - (2) The AOC holder's operations specifications.
  - (3) The need for, and content of, the relevant parts of the AOC holder's Operations Manual.
  - (4) The AOC holder's ground operations concept.
  - (5) The National Civil Aviation Security Program, the Operator's Security Program, and security training requirements and threat assessment.
- (h) The management personnel should have practical experience in:
  - (1) Application of aviation safety standards and safe operating practices.
  - (2) Appropriate management experience in comparable organization(s).
- (i) The management personnel should have familiarity with Quality System.
- (j) An AOC holder may employ a person who does not meet the appropriate airman qualification or experience if the Authority issues a deviation finding that that person has comparable experience and can effectively perform the required management function.

### **IS: 9.2.2.3 QUALITY SYSTEM**

- (a) In order to show compliance with Subpart 9.2.2.3, an AOC holder should establish its quality system in accordance with the instruction and information contained in the following paragraphs:

## **1.0 GENERAL**

### **1.1 TERMINOLOGY**

- (a) The terms used in the context of the requirement for an AOC 's quality system have the following meaning:
  - (1) Accountable Manager. The person acceptable to the Authority who has corporate authority for ensuring that all operations and maintenance activities can be

financed and carried out to the standard required by the Authority, and any additional requirements defined by the operator.

- (2) Quality assurance. Quality assurance, as distinguished from quality control, involves activities in the business, systems, and technical audit areas. A set of predetermined systemic actions, which are required to provide adequate confidence that a product or service satisfies quality requirements.

## **1.2 QUALITY POLICY**

- 1.2.1** An operator shall establish a formal, written quality policy statement that is a commitment by the accountable manager as to what the quality system is intended to achieve. The quality policy should reflect the achievement and continued compliance with the CAR together with any additional standards specified by the operator.
- 1.2.2** The accountable manager is an essential part of the operator's management organization. With regard to the text in Subpart 9.2.2.2(a), the term "accountable manager" is intended to mean the Chief Executive/President/Managing Director/General Manager, etc. of the operator's organization, who by virtue of his or her position has overall responsibility (including financial) for managing the organization.
- 1.2.3** The accountable manager will have overall responsibility for the operator's quality system, including the frequency, format and structure of the internal management evaluation activities as prescribed in paragraph 3.9 below.

## **1.3 PURPOSE OF THE QUALITY SYSTEM.**

- 1.3.1** The quality system should enable the operator to monitor compliance with this CAR, the operator's manual system, and any other standards specified by the operator, or the Authority, to ensure safe operations and airworthy aircraft.

## **1.4 QUALITY MANAGER**

- 1.4.1** The function of the quality manager to monitor compliance with, and the adequacy of, procedures required to ensure safe operational practices and airworthy aircraft as required by these CAR may be carried out by more than one person by means of different, but complementary, quality assurance programs.
- 1.4.2** The primary role of the quality manager is to verify, by monitoring activity in the fields of flight operations, maintenance, crew training and ground operations, that the standards required by the Authority, and any additional requirements defined by the operator, are being carried out under the supervision of the relevant required management personnel.
- 1.4.3** The quality manager should be responsible for ensuring that the quality assurance program is properly established, implemented and maintained.
- 1.4.4** The quality manager should:
- (a) Report to the accountable manager; and
  - (b) Have access to all parts of the operator's, and as necessary, any sub-contractor's organization.
- 1.4.5** In the case of small/very small operators, the posts of the Accountable Manager and quality manager may be combined.

## 2.0 QUALITY SYSTEM

### 2.1 INTRODUCTION

- 2.1.2 The operator's quality system should ensure compliance with and adequacy of operational and maintenance activities requirements, standards, and operational procedures.
- 2.1.3 The operator should specify the basic structure of the quality system applicable to the operation.
- 2.1.4 The quality system should be structured according to the size and complexity of the operation to be monitored.

### 2.2 SCOPE

2.2.1 As a minimum, the quality system should address the following:

- (a) The provisions of these Regulations;
- (b) The operator's additional standards and operating practices;
- (c) The operator's quality policy;
- (d) The operator's organizational structure;
- (e) Responsibility for the development, establishment and management of the quality system;
- (f) Documentation, including manuals, reports and records;
- (g) Quality procedures;
- (h) Quality assurance program;
- (i) The required financial, material and human resources;

2.2.2 The quality system should include a feedback system to the accountable manager to ensure that corrective actions are both identified and promptly addressed. The feedback system should also specify who is required to rectify discrepancies and non-compliance in each particular case, and the procedure to be followed if corrective action is not completed within an appropriate timescale.

### 2.3 RELEVANT DOCUMENTATION

2.3.1 Relevant documentation includes the relevant part of the operator's manual system.

2.3.2 In addition, relevant document should include the following:

- (a) Quality policy;
- (b) Terminology;
- (c) Specified operational standards;
- (d) A description of the organization;
- (e) The allocation of the duties and responsibilities;
- (f) Operational procedures to ensure regulatory compliance;
- (g) Safety management system/program;
- (h) The quality assurance program, reflecting:
  - (1) Schedule of the monitoring process;

- (2) Audit procedures;
- (3) Reporting procedures;
- (4) Follow up and corrective action procedures;
- (5) Recording system;
- (6) The training syllabus; and
- (7) Document control.

### **3.0 QUALITY ASSURANCE PROGRAM**

#### **3.1 INTRODUCTION**

**3.1.1** The quality assurance program should include all planned and systematic actions necessary to provide confidence that all operations and maintenance are conducted in accordance with all applicable requirements, standards and operational procedures.

**3.1.2** When establishing a quality assurance program, consideration should be given to at least the following:

- (a) Quality inspection;
- (b) Audit;
- (c) Auditors;
- (d) Auditor's independence
- (e) Audit scope;
- (f) Audit scheduling;
- (g) Monitoring and corrective action; and
- (h) Management evaluation.

#### **3.2 QUALITY INSPECTION**

**3.2.1** The primary purpose of a quality inspection is to observe a particular event/action/document, etc. in order to verify whether established operational procedures and requirements are followed during the accomplishment of that event and whether the required standard is achieved.

**3.2.2** Typical subject areas for quality inspections are:

- (a) Actual flight operations;
- (b) Ground deicing/anti-icing;
- (c) Flight support services;
- (d) Load control;
- (e) Maintenance;
- (f) Technical standards; and
- (g) Training standards.

**3.2.3** Typical methods for quality inspections for maintenance include:

- (a) Product sampling - the part inspection of a representative sample of the aircraft fleet;
- (b) Defect sampling - the monitoring of defect rectification performance;

- (c) Concession sampling - the monitoring of any concession to not carry out maintenance on time;
- (d) On time maintenance sampling - the monitoring of when (flying hours/calendar time/flight cycles, etc) aircraft and their components are brought in for maintenance;
- (e) Sample reports of unairworthy conditions and maintenance errors on aircraft and components.

### **3.3 AUDIT**

**3.3.1** An audit is a systematic, and independent comparison of the way in which an operation is being conducted against the way in which the published operational procedures say it should be conducted.

**3.3.2** Audits should include at least the following quality procedures and processes:

- (a) A statement explaining the scope of the audit;
- (b) Planning and preparation;
- (c) Gathering and recording evidence; and
- (d) Analysis of the evidence.

**3.3.3** Techniques that contribute to an effective audit are:

- (a) Interviews or discussions with personnel;
- (b) review of published documents;
- (c) The examination of an adequate sample of records;
- (d) The witnessing of the activities that make up the operation; and
- (e) The preservation of documents and the recording of observations.

### **3.4 AUDITORS**

**3.4.1** An operator should decide, depending upon the complexity of the operations, whether to make use of a dedicated audit team or a single auditor. In any event, the auditor or audit team should have relevant operational and/or maintenance experience.

**3.4.2** The responsibilities of the auditors should be clearly defined in the relevant documentation.

### **3.5 AUDITOR'S INDEPENDENCE**

**3.5.1** Auditors should not have any day-to-day involvement in the area of the operation and/or maintenance activity that is to be audited. An operator may, in addition to using the services of full-time dedicated personnel belonging to a separate quality department, undertake the monitoring of specific areas or activities by the use of part-time auditors. An operator whose structure and size does not justify the establishment of full-time auditors, may undertake the audit function by the use of part-time personnel from within its own organization or from an external source under the terms of an agreement acceptable to the Authority. In all cases the operator should develop suitable procedures to ensure that persons directly responsible for the activities to be audited are not selected as part of the auditing team. Where external auditors are used, it is essential that any external specialist is familiar with the type of operation and/or maintenance conducted by the operator.

**3.5.2** The operator's quality assurance program should identify the persons within the company who have the experience, responsibility and authority to:

- (a) Perform quality inspections and audits as part of ongoing quality assurance;
- (b) Identify and record any concerns or findings, and the evidence necessary to substantiate such concerns or findings;
- (c) Initiate or recommend solutions to concerns or findings through designated reporting channels;
- (d) Verify the implementation of solutions within specific timescales;
- (e) Report directly to the quality manager.

### **3.6 AUDIT SCOPE**

**3.6.1** Operators are required to monitor compliance with the operational and maintenance procedures they have designed to ensure safe operations, airworthy aircraft and the serviceability of both operational and safety equipment. In doing so they should as a minimum, and where appropriate, monitor:

- (a) Organization;
- (b) Plans and company objectives;
- (c) Operational procedures;
- (d) Flight safety;
- (e) Operator certification (AOC/Operations specifications)
- (f) Supervision;
- (g) Aircraft performance;
- (h) All weather operations;
- (i) Communications and navigational equipment and practices;
- (j) Mass, balance and aircraft loading;
- (k) Instruments and safety equipment;
- (l) Manuals, logs, and records;
- (m) Flight and duty time limitations, rest requirements, and scheduling;
- (n) Aircraft maintenance/operations interface;
- (o) Use of the MEL;
- (p) Maintenance programs and continued airworthiness;
- (q) Airworthiness directives management;
- (r) Maintenance accomplishment;
- (s) Defect deferral;
- (t) Flight crew;
- (u) Cabin crew;
- (v) Dangerous goods;
- (w) Security; and
- (x) Training.



### **3.7 AUDIT SCHEDULING**

- 3.7.1** A quality assurance program should include a defined audit schedule and a periodic review cycle area by area. The schedule should be flexible, and allow unscheduled audits when trends are identified. Follow-up audits should be scheduled when necessary to verify that corrective action was carried out and that it was effective.
- 3.7.2** An operator should establish a schedule of audits to be completed during a specified calendar period. All aspects of the operation should be reviewed within every 12 month period in accordance with the program unless an extension to the audit period is accepted as explained below. An operator may increase the frequency of audits at its discretion but should not decrease the frequency without the agreement of the Authority. Audit frequency should not be decreased beyond a 24 month period interval.
- 3.7.3** When an operator defines the audit schedule, significant changes to the management, organization, operation, or technologies should be considered as well as changes to the regulatory requirements.

### **3.8 MONITORING AND CORRECTIVE ACTION**

- 3.8.1** The aim of monitoring within the quality system is primarily to investigate and judge its effectiveness and thereby to ensure that defined policy, operational, and maintenance standards are continuously complied with. Monitoring activity is based upon quality inspections, audits, corrective action and follow-up. The operator should establish and publish a quality procedure to monitor regulatory compliance on a continuing basis. This monitoring activity should be aimed at eliminating the causes of unsatisfactory performance.
- 3.8.2** Any non-compliance identified as a result of monitoring should be communicated to the manager responsible for taking corrective action or, if appropriate, the accountable manager. Such non-compliance should be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of appropriate corrective action.
- 3.8.3** The quality assurance program should include procedures to ensure that corrective actions are taken in response to findings. These quality procedures should monitor such actions to verify their effectiveness and that they have been completed. Organizational responsibility and accountability for the implementation of corrective action resides with the department cited in the report identifying the finding. The accountable manager will have the ultimate responsibility for resourcing the corrective actions and ensuring, through the quality manager, that the corrective action has re-established compliance with the standard required by the Authority, and any additional requirements defined by the operator.
- 3.8.4** Corrective action. Subsequent to the quality inspection/audit, the operator should establish the seriousness of any findings and any need for immediate corrective action.
- 3.8.5** The quality manager should:
- (a) Verify that corrective action is taken by the manager responsible in response to any finding of non-compliance;
  - (b) Verify the corrective action includes the elements outlined in paragraph 3.8.4 above;
  - (c) Monitor the implementation and completion of corrective action.
  - (d) Provide management with an independent assessment of corrective action; implementation and completion; and

- (e) Evaluate the effectiveness of corrective action through follow-up process.

### **3.9 MANAGEMENT EVALUATION**

- 3.9.1** A management evaluation is a comprehensive, systematic, documented review by the management of the quality system, operational policies and procedures, and should consider:
- (a) The results of quality inspections, audits and any other indicators; and
  - (b) The overall effectiveness of the management organization in achieving stated objectives.
- 3.9.2** A management should identify and correct trends, and prevent, where possible, future non-conformities. Conclusions and recommendations made as a result of an evaluation should be submitted in writing to the responsible manager for action. The responsible manager should be an individual who has the authority to resolve issues and take action.
- 3.9.3** The accountable manager should decide upon the frequency, format and structure of internal management evaluation activities.

### **3.10 RECORDING**

- 3.10.1** Accurate, complete and readily accessible records documenting the results of the quality assurance program should be maintained by the operator. Records are essential data to enable an operator to analyze and determine the root causes of non-conformity, so that areas of non-compliance can be identified and addressed.
- 3.10.2** The following records should be retained for a period of 5 years:
- (a) Audit schedules;
  - (b) Quality inspection and audit reports;
  - (c) Responses to findings;
  - (d) Corrective action reports;
  - (e) Follow-up and closure reports; and
  - (f) Management evaluation reports.

## **4.0 QUALITY ASSURANCE RESPONSIBILITY FOR SUB-CONTRACTORS**

### **4.1 SUB-CONTRACTORS**

- 4.1.1** Operators may decide to sub-contract out certain activities to external agencies for the provision of services related to areas such as:
- (a) Ground deicing/anti-icing;
  - (b) Maintenance;
  - (c) Ground handling;
  - (d) Flight support (including performance calculations, flight planning, navigation database and dispatch);
  - (e) Training; and
  - (f) Manual preparation.

- 4.1.2** The ultimate responsibility for the product or service provided by the sub-contractor always remains with the operator. A written agreement should exist between the operator and the sub-contractor clearly defining the safety related services and quality to be provided. The sub-contractor's safety related activities relevant to the agreement should be included in the operator's quality assurance program.
- 4.1.3** The operator should ensure that the sub-contractor has the necessary authorization/approval when required and commands the resources and competence to undertake the task.

## **5.0 QUALITY SYSTEM TRAINING**

### **5.1 GENERAL**

- 5.1.1** An operator should establish effective, well planned and resourced quality related briefing for all personnel.
- 5.1.2** Those responsible for managing the quality system should receive training covering:
- (a) An introduction to the concept of the quality system;
  - (b) Quality management;
  - (c) The concept of quality assurance;
  - (d) Quality manuals;
  - (e) Audit techniques;
  - (f) Reporting and recording; and
  - (g) The way in which the quality system will function in the company.
- 5.1.3** Time should be provided to train every individual involved in quality management and for briefing the remainder of the employees. The allocation of time and resources should be governed by the size and complexity of the operation concerned.

### **5.2 SOURCES OF TRAINING**

- 5.2.1** Quality management courses are available from various National and/or International Standards Institutions, and an operator should consider whether to offer such courses to those likely to be involved in the management of quality systems. Operators with sufficient appropriately qualified staff should consider whether to carry out in-house training.

## **6.0 ORGANIZATIONS WITH 20 OR LESS FULL-TIME EMPLOYEES**

- 6.1** The requirement to establish and document a quality system, and to employ a quality manager applies to all operators. References to large and small operators elsewhere in these Regulations are governed by aircraft capacity (i.e.: more or less than 20 seats) and by mass (i.e.: greater or less than 10,000 kg maximum take-off mass). Such terminology is not relevant when considering the scale of an operation and quality system required. In the context of quality systems therefore, Operators should be categorized according to number of full time staff employees.

### **6.2 SCALE OF OPERATION**

- 6.2.1** Operators who employ 5 or less full time staff are considered to be “very small” while those employing between 6 and 20 full time employees are regarded as “small” operators as far as quality systems are concerned. Full-time in this context means employed for not less than 35 hours per week excluding vacation period.
- 6.2.2** Complex quality systems could be inappropriate for small or very small operators and the clerical effort required to draw-up manuals and quality procedures for a complex system may stretch their resources. It is therefore accepted that such operators should tailor their quality systems to suit the size and complexity of their operation and allocate resources accordingly.

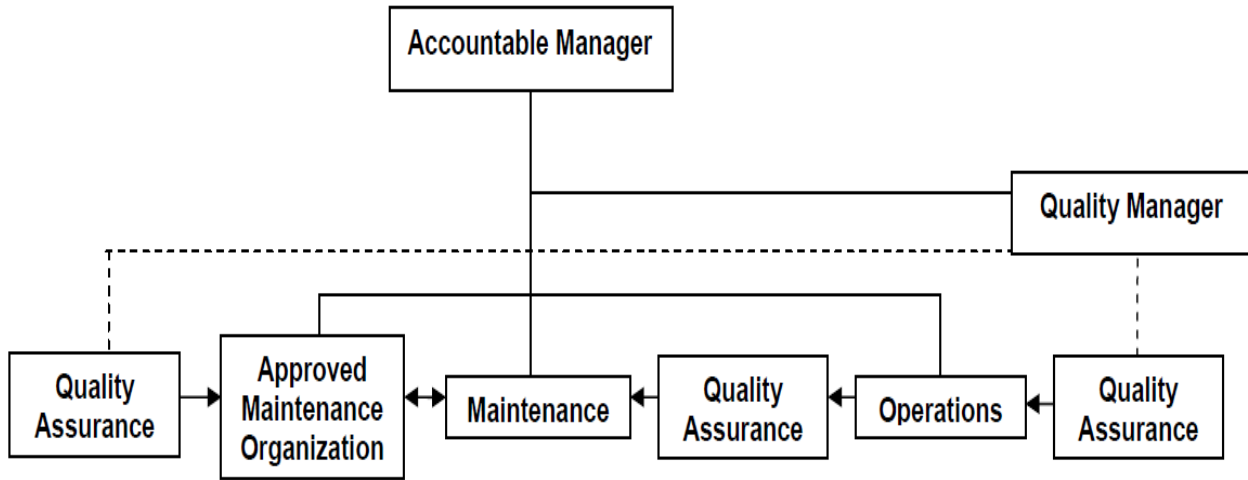
### **6.3 QUALITY SYSTEM FOR SMALL/VERY SMALL OPERATORS**

- 6.3.1** For small and very small operators it may be appropriate to develop a quality assurance program that employs a checklist. The checklist should have a supporting schedule that requires completion of all checklist items within a specified timescale, together with a statement acknowledging completion of a periodic review by top management. An occasional independent overview of the checklist content and achievement of the quality assurance should be undertaken.
- 6.3.2** The “small” operator may decide to use internal or external auditors or a combination of the two. In these circumstances it would be acceptable for external specialists and qualified organizations to perform the quality audits on behalf of the quality manager.
- 6.3.3** If the independent quality audit function is being conducted by external auditors, the audit schedule should be shown in the relevant documentation.
- 6.3.4** Whatever arrangements are made, the operator retains the ultimate responsibility for the quality system and especially the completion and follow-up of corrective actions.

### **QUALITY SYSTEM - ORGANIZATION EXAMPLES**

- (a) The following diagrams illustrate two typical examples of Quality organizations:
- (1) Quality System within the AOC holder’s organization when the AOC holder also holds an approval for maintenance.

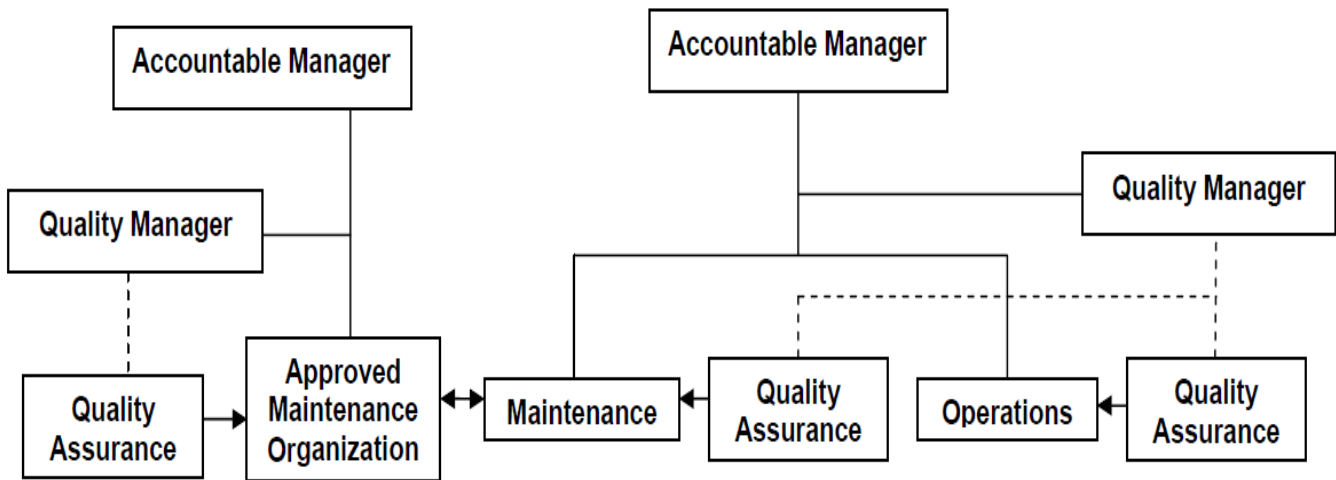
QUALITY SYSTEM



(2) Quality Systems related to an AOC holder's organization where aircraft maintenance is contracted out to an approved organization which is not integrated with the AOC holder.

Approved Maintenance Organization

AOC Holder Organization



*Note: The Quality System and Quality Assurance Program of the AOC holder should assure that the maintenance carried out by the approved organization is in accordance with requirements specified by the AOC holder*

**IS: 9.2.2.5 RETENTION OF RECORDS**

- (a) An operator shall ensure that the following information or documentation is retained for the periods shown in the table below.

**TABLE OF RECORD RETENTION**

<b>Flight Crew Records</b>	
Flight, duty and rest time	2 years
License and medical certificate	Until 12 months after the flight crew member has left the employ of the operator
Ground and flight training (all types)	Until 12 months after the flight crew member has left the employ of the operator
Route and aerodrome/heliport qualification training	Until 12 months after the flight crew member has left the employ of the operator
Dangerous good training	Until 12 months after the flight crew member has left the employ of the operator
Security training	Until 12 months after the flight crew member has left the employ of the operator
Proficiency and qualification checks (all types)	Until 12 months after the flight crew member has left the employ of the operator
<b>Cabin Crew Records</b>	
Flight, duty and rest time	2 years
License, if applicable	Until 12 months after the cabin crew member has left the employ of the operator
Ground and flight training (all types) and qualification checks	Until 12 months after the cabin crew member has left the employ of the operator
Dangerous good training	Until 12 months after the cabin crew member has left the employ of the operator
Security training	Until 12 months after the cabin crew member has left the employ of the operator
Competency checks	Until 12 months after the cabin crew member has left the employ of the operator



TABLE OF RECORD RETENTION—CONTINUED

<b>Records for other AOC Personnel</b>	
Training/qualification of other personnel for whom an approved training program is required in these regulations	Until 12 months after the employee has left the employ of the operator
License, if required, and medical certificate if required	Until 12 months after the employee has left the employ of the operator
Proficiency or competency checks, if required	Until 12 months after the employee has left the employ of the operator
<b>Forms related to Flight Preparation</b>	
Completed load manifest	3 months after the completion of the flight
Mass and balance reports	3 months after the completion of the flight
Dispatch releases	3 months after the completion of the flight
Flight plans (ATS)	3 months after the completion of the flight
Operational flight plan	3 months after the completion of the flight
Passenger manifests	3 months after the completion of the flight
Weather reports	3 months after the completion of the flight
<b>Flight Recorder Records</b>	
Cockpit voice recordings	Preserved after an accident or incident for 60 days or longer if requested by the Authority
Flight data recordings	Preserved after an accident or incident for 60 days or longer if requested by the Authority
<b>Aircraft Technical Logbook</b>	
Journey records section	2 years
Maintenance records section	2 years
<b>Maintenance Records of the Aircraft</b>	
Total time in service (hours, calendar time and cycles, as appropriate) of the aircraft and all life-limited components	3 months after the unit to which they refer has been permanently withdrawn from service
Current status of compliance with all mandatory continuing airworthiness information	3 months after the unit to which they refer has been permanently withdrawn from service
Appropriate details of modifications and repairs to the aircraft and its components	3 months after the unit to which they refer has been permanently withdrawn from service
Total time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aircraft or its components subject to a mandatory overhaul life	3 months after the unit to which they refer has been permanently withdrawn from service
The detailed maintenance records to show all requirements for a maintenance release have been met	1 year after signing of the maintenance release
<b>Other Records</b>	
Quality system records	5 years
Dangerous goods transport document	6 months after the completion of the flight
Dangerous goods acceptance checklist	6 months after the completion of the flight
Records on cosmic and solar radiation dosage, if AOC holder operates aircraft that fly above 15,000 m (49,000 ft)	Until 12 months after the crew member has left the employ of the AOC holder

*Note: See Subpart 9.3.1.5 for details of the journey records section and Subpart 9.4.1.9 for details of the maintenance records section of the aircraft technical log.*



IS: 9.2.2.8 AIRCRAFT TECHNICAL LOG

The following are two examples of an aircraft technical log:

Name of the Operator <sup>1</sup> Address of the operator	Flight Log <sup>2</sup>	Name of Pilot-in-Command:	Registration:	Sheet No <sup>3</sup> :
	Pilot-in-Command's Signature <sup>4</sup> :	Name and duty of other Crew Member(s):	Airplane Type:	Date:

FLIGHT <sup>5</sup>				CHECK	BLOCK TIME			AIRBORNE TIME			LOAD		FUEL ON BOARD		
Nature of Flight: <sup>6</sup>	From :	To	No. of Ldgs.: <sup>7</sup>	Flight Preparation: <sup>8</sup>	Off:	On:	Time:	Take-off:	Ldg:	Time:	No. of Pax/Cargo (kg/lbs):	Take-off mass (kg/lbs):	Uplift:	Take-off <sup>9</sup> (ltrs/kg/lbs):	Ldg:

FLIGHT DATA BLOCK TIME REPORT					INCIDENTS/OCCURRENCES/OBSERVATIONS REPORT/DEFECTS NOTED <sup>10</sup>										
Total per Day:		Block Time:	Landings:	Mark type of report: Operation/Technical/Other <sup>11</sup> . Also note any de-/anti-icing as instructed <sup>12</sup>											
Total Previous Report:															
Total to Report:															
FLIGHT DATA FLIGHT TIME REPORT					CERTIFICATE OF RETURN TO SERVICE						ACTIONS TAKEN <sup>13</sup>				
Total this sheet:		Flight Time:	Next Maintenance Due:	Hours	Name of certifying staff and CAR Part 6 approval reference (if applicable)										
Total from previous sheet:		Landings		Certifies that the work specified except as otherwise specified was carried out in accordance with CAR Part 6 and in respect to that work the aircraft/aircraft component is considered ready for Return to Service.											
Total to Report:		Date		Signature											

<sup>1</sup>Operator's name and address pre-printed or filled in by hand

<sup>2</sup>Must be filled for

- Each day; and
- Each flight crew

<sup>3</sup>Sheet number (e.g. year-number) must be pre-printed or printed by hand. All sheets must be identifiable and numbered according to a continuous system that offers the same security when hand printed as when pre-printed.

<sup>4</sup>The signature of Pilot –in-Command states that everything on this sheet is correct

<sup>5</sup>For flights from A to A, a summary entry may be made. All other flights such as A to B etc., for each flight an entry must be made.

<sup>6</sup>Such as Private, Commercial, Technical, Training, Sailplane towing, etc.

<sup>7</sup>Number of landings if summary entry

<sup>8</sup>Flight Preparation according to the Operations Manual (commander's initials) state that"

1. Weight and Balance is within Limit
2. Pre-flight check is done
3. Technical status is checked and airplane accepted by the commander
4. Passengers manifest/documentation performed

<sup>9</sup>Total Fuel on board (state the units unless pre-printed)

<sup>10</sup>Incidents/Occurrences/Observations Report (Operation, Technical, Others):

- If no report needs to be made state "-NIL-"
- If a report must be made state (mark) the type of report

<sup>11</sup>Number each observation sequentially for each log sheet

<sup>12</sup>If de- or anti-icing has been applied, state time and amount and kind of fluid applied or other action take, e.g. mechanical removal of snow or ice, if oil has been filled, state the time and amount.

<sup>13</sup>Use the same number as the corresponding observation to link report and response.

Address of operator:		Date:		CREW		LOAD		OIL		GROUND DEICING		Sheet number 00000001	
		Date:		Name of Commander: Name and duty of crew member		No. of Pax: Mass (kg/lbs) Cargo: Take-off:		Engine 1 / Engine 2 Refilled: / Total: /		Type of fluid: Mixture: Time of deicing Commenced: Finished:		Last release: Total airplane hours: Total airplane landing: Next maintenance due: In hours: In landing:	
FLIGHT		PRE-FLIGHT		BLOCK TIME		AIRBORNE TIME		FUEL ON BOARD (LTRS/KG/LBS)					
Flight Nb:	From:	To:	No. of Ldg:	Name/Signature:	Off:	On:	Time:	Take-off:	Ldg:	Time:	Uplift:	Take-off:	Ldg:
				<b>Defects</b>		<b>Signature</b>		<b>Actions Taken</b>				<b>AMO Release to Service</b>	
00000001-1												Agreement number: Date: Place: Time: Name: Signature:	
00000001-2								PN: sn off: sn on:				Agreement number: Date: Place: Time: Name: Signature:	
00000001-3								PN: sn off: sn on:				Agreement number: Date: Place: Time: Name: Signature:	
Item MEL		MEL DEFERRED DEFECT		Captain's Acceptance		Daily check/Maintenance done:						Agreement number: Date: Place: Time: Name: Signature:	
		Open Date		Category		Limit Date							

**IS: 9.2.2.10 FLIGHT SAFETY DOCUMENTS SYSTEM**

- (a) The following outline addresses the major elements of an operator's flight safety documents system development process, with the aim of ensuring compliance with these Regulations.

**1.0 ORGANIZATION**

- 1.1** A flight safety documents system shall be organized according to criteria, which ensure easy access to information, required for flight and ground operations contained in the various operational documents comprising the system and which facilitate management of the distribution and revision of operational documents.
- 1.2** Information contained in a flight safety documents system shall be grouped according to the importance and use of the information, as follows:
- (a) Time critical information, e.g., information that can jeopardize the safety of the operation if not immediately available;
  - (b) Time sensitive information, e.g., information that can affect the level of safety or delay the operation if not available in a short time period;
  - (c) Frequently used information;
  - (d) Reference information, e.g., information that is required for the operation but does not fall under (b) or (c) above; and
  - (e) Information that can be grouped based on the phase of operation in which it is used.
- 1.3** Time critical information shall be placed early and prominently in the flight safety documents system.
- 1.4** Time critical information, time sensitive information, and frequently used information shall be placed in cards and quick-reference guides.

**2.0 VALIDATION**

A flight safety documents system shall be validated before deployment, under realistic conditions. Validation shall involve the critical aspects of the information use, in order to verify its effectiveness. Interactions among all groups that can occur during operations shall also be included in the validation process.

**3.0 DESIGN**

- 3.1** A flight safety documents system shall maintain consistency in terminology and in the use of standard terms for common items and actions.
- 3.2** Operational documents shall include a glossary of terms, acronyms and their standard definition, updated on a regular basis to ensure access to the most recent terminology. All significant terms, acronyms and abbreviations included in the flight documents system shall be defined.
- 3.3** A flight safety documents system shall ensure standardization across document types, including writing style, terminology, use of graphics and symbols, and formatting across documents. This includes a consistent location of specific types of information, consistent use of units of measurement and consistent use of codes.
- 3.4** A flight safety documents system shall include a master index to locate, in a timely manner, information included in more than one operational document.

*Note: The master index must be placed in the front of each document and consist of no more than three levels of indexing. Pages containing abnormal and emergency information must be tabbed for direct access.*

- 3.5 A flight safety documents system shall comply with the requirements of the operator's quality system, if applicable.

#### 4.0 DEPLOYMENT

Operators shall monitor deployment of the flight safety documents system, to ensure appropriate and realistic use of the documents, based on the characteristics of the operational environment and in a way which is both operationally relevant and beneficial to operational personnel. This monitoring shall include a formal feedback system for obtaining input from operational personnel.

#### 5.0 AMENDMENT

- 5.1 Operators shall develop an information gathering, review, distribution and revision control system to process information and data obtained from all sources relevant to the type of operation conducted, including, but not limited to, the State of the Operator, State of design, State of Registry, manufacturers and equipment vendors.

*Note: Manufacturers provide information for the operation of specific aircraft that emphasizes the aircraft systems and procedures under conditions that may not fully match the requirements of operators. Operators shall ensure that such information meets their specific needs and those of the local authority.*

- 5.2 Operators shall develop an information gathering, review and distribution system to process information resulting from changes that originate within the operator, including:

- (a) Changes resulting from the installation of new equipment;
- (b) Changes in response to operating experience;
- (c) Changes in an operator's policies and procedures;
- (d) Changes in an operator certificate; and
- (e) Changes for purposes of maintaining cross fleet standardization.

*Note: Operators shall ensure that crew coordination philosophy, policies and procedures are specific to their operation.*

- 5.3 A flight safety documents system shall be reviewed:

- (a) On a regular basis (at least once a year);
- (b) After major events (mergers, acquisitions, rapid growth, downsizing, etc.);
- (c) After technology changes (introduction of new equipment); and
- (d) After changes in safety regulations.

- 5.4 Operators shall develop methods of communicating new information. The specific methods shall be responsive to the degree of communication urgency.

*Note: As frequent changes diminish the importance of new or modified procedures, it is desirable to minimize changes to the flight safety documents system.*

- 5.5 New information shall be reviewed and validated considering its effects on the entire flight safety documents system.

- 5.6 The method of communicating new information shall be complemented by a tracking system to ensure currency by operational personnel. The tracking system shall include a procedure to verify that operational personnel have the most recent updates.

#### IS: 9.2.3.2 DRY LEASING OF FOREIGN REGISTERED AIRCRAFT

- (a) An operator may dry lease an aircraft for the purpose of commercial air transportation to any AOC holder of a State which is signatory to the Chicago Convention provided that the following conditions are met:
- (1) The aircraft carries an appropriate airworthiness certificate issued, in accordance with ICAO Annex 8, by the country of registration and meets the registration and identification requirements of that country.
  - (2) The aircraft is of a type design which complies with all of the requirements that would be applicable to that aircraft were it registered in Republic of the Philippines, including the requirements which shall be met for issuance of a Republic of the Philippines standard airworthiness certificate (including type design conformity, condition for safe operation, and the noise, fuel venting, and engine emission requirements).
  - (3) The aircraft is maintained according to an approved maintenance program.
  - (4) The aircraft is operated by Republic of the Philippines-certified airmen employed by the AOC holder.
- (b) Each operator shall provide the Authority with a copy of the dry lease to be executed.
- (c) Operational control of any dry leased aircraft rests with the operator operating that aircraft.
- (d) The Authority will remove a dry leased aircraft from the lessors AOC holder's operations specifications and list it on the foreign operator lessee's operations specifications.
- (e) Each operator engaged in dry leasing aircraft shall make the dry lease agreement explicit concerning the maintenance program and MEL to be followed during the term of the dry lease.

In case of total-wet lease, the operational control is deemed to be with the lessor.

In case of total wet lease, the aircraft and its registration involved will remain in the nationality of AOC and OPSPEC of the lessor. Thus, for the purpose of this regulation, expiration of the lessor's AOC shall automatically suspend the lease agreement.

In case of any other wet lease, and the parties do not expressly stipulate who should assume operational control, the same is presumed to be with the lessee and Philippine civil aviation regulations (PCAR) shall be applied.

In case of a wet lease other than a total-wet lease, and the operational control is with the lessee who is a holder of a CAAP-AOC, the State of Registry and the lessee of said aircraft should allow the application of the provisions of PCAR on airworthiness, registration and marks of aircraft, flight operations, and qualification of airmen.

Any holder of a Philippine AOC shall apply for an amendment of its AOC and OPSPEC to reflect any type of wet lease agreement.

Any holder of a CAAP-AOC cannot engage in any type of wet lease arrangement without a valid and subsisting insurance coverage. Thus for the purpose of this regulations, the operation in the Philippines of the aircraft subject of a wet lease

arrangement is deemed suspended upon termination or expiration of the insurance coverage.

For the purpose of these regulations, the lessee shall submit to the Authority an original copy or certified original of the portion of the AOC and OPSPEC of the lessor reflecting the lease arrangement.

In case of foreign-AOC who are party to a lease of commercial aircraft intended to be operated in the Philippines, the lessee/operator shall comply with the existing bilateral air agreement with the Philippines and aviation regulations of CAAP.

Sub-leasing of a foreign-registered aircraft to a Philippine-AOC holder should comply with legal requirements on contracts, rules on operational control, and CAAP aviation rules and regulations.

### **IS: 9.2.3.3 AIRCRAFT INTERCHANGE**

- (a) Before operating under an interchange agreement, each AOC holder shall show that:
- (1) The procedures for the interchange operation conform with safe operating practices;
  - (2) Required crew members and flight operations officers meet approved training requirements for the aircraft and equipment to be used and are familiar with the communications and dispatch procedures to be used;
  - (3) Maintenance personnel meet training requirements for the aircraft and equipment and are familiar with the maintenance procedures to be used;
  - (4) Flight crew members and flight operations officers meet appropriate route and airport qualifications;
  - (5) The aircraft to be operated are essentially similar to the aircraft of the AOC holder with whom the interchange is effected; and
  - (6) The arrangement of flight instruments and controls that are critical to safety are essentially similar, unless the authority determines that the AOC holder has adequate training Programs to insure that any potentially hazardous dissimilarities are safely overcome by flight crew familiarization.
- (b) Each AOC holder conducting an interchange agreement shall include the pertinent provisions and procedures of the agreement in its manuals.
- (c) The AOC holder shall amend their operations specifications to reflect an interchange agreement.
- (d) The AOC holder shall comply with the applicable regulations of the State of Registry of an aircraft involved in an interchange agreement while it has operational control of that aircraft.



**IS: 9.2.3.4 WET LEASING**

- (a) Wet lease of foreign-registered aircraft
- (1) Each AOC holder shall provide the Authority with a copy of the wet lease to be executed.
  - (2) The Authority will determine which party to a wet lease agreement has operational control considering the extent and control of certain operational functions such as:
    - (i) Initiating and terminating flights.
    - (ii) Maintenance and servicing of aircraft.
    - (iii) Scheduling crewmembers.
    - (iv) Paying crewmembers.
    - (v) Training crewmembers.
  - (3) Each AOC holder engaged in a wet leasing arrangement shall amend its operations specifications to contain the following information:
    - (i) The names of the parties to the agreement and the duration of the agreement.
    - (ii) The make, model, and series of each aircraft involved in the agreement.
    - (iii) The kind of operation.
    - (iv) The expiration date of the lease agreement.
    - (v) A statement specifying the party deemed to have operational control.
    - (vi) Any other item, condition, or limitation the Authority determines necessary.
    - (vii) In case of total-wet lease, the operational control is deemed to be with the lessor.
    - (viii) In case of total wet lease, the aircraft and its registration involved will remain in the nationality of AOC and OPSPEC of the lessor. Thus, for the purpose of this regulation, expiration of the lessor's AOC shall automatically suspend the lease agreement.
    - (ix) In case of any other wet lease, and the parties do not expressly stipulate who should assume operational control, the same is presumed to be with the lessee and Philippine civil aviation regulations (PCAR) shall be applied.
    - (x) In case of a wet lease other than a total-wet lease, and the operational control is with the lessee who is a holder of a CAAP-AOC, the State of Registry and the lessee of said aircraft should allow the application of the provisions of PCAR on airworthiness, registration and marks of aircraft, flight operations, and qualification of airmen.
    - (xi) Any holder of a Philippine AOC shall apply for an amendment of its AOC and OPSPEC to reflect any type of wet lease agreement.
    - (xii) Any holder of a CAAP-AOC cannot engage in any type of wet lease arrangement without a valid and subsisting insurance coverage. Thus for the purpose of this regulations, the operation in the Philippines of the aircraft subject of a wet lease arrangement is deemed suspended upon termination or expiration of the insurance coverage.
    - (xiii) For the purpose of these regulations, the lessee shall submit to the Authority an original copy or certified original of the portion of the AOC and OPSPEC of the lessor reflecting the lease arrangement.

- (xiv) In case of foreign-AOC who are party to a lease of commercial aircraft intended to be operated in the Philippines, the lessee/operator shall comply with the existing bilateral air agreement with the Philippines and aviation regulations of CAAP.
  - (xv) Sub-leasing of a foreign-registered aircraft to a Philippine-AOC holder should comply with legal requirements on contracts, rules on operational control, and CAAP aviation rules and regulations.
- (b) Method of recording of foreign aircraft covered by a total wet lease agreement
- The Authority shall record the following documents affecting foreign registered aircraft and all interest therein evidenced by originals of the documents filled, attaching the official receipt as proof of payment for registration purposes, in chronological order, in files kept for that purpose and indexed to show:
- (1) AOC, OPSPEC of the lessor and airworthiness certificate in case of total wet lease including its engines, appliances and requirement;
  - (2) A valid insurance coverage/The names of the parties to the lease agreement; and
  - (3) The date of the instrument and the date and time it is recorded.
- (c) Validity and effectivity of registration of lease agreement
- (1) Registration made pursuant to the provisions of these regulations shall be valid and binding upon filing of application thereof and payment of the corresponding fee.
  - (2) No document affecting title to or any interest in such aircraft, aircraft engines, propellers, appliances, or spare parts shall be valid except as pursuant to these regulations.

#### **IS: 9.2.3.5 EMERGENCY EVACUATION DEMONSTRATION**

- (a) With reference to Subpart 9.2.3.5, when an AOC holder conducts a partial emergency evacuation or ditching evacuation, observed by the Authority, that demonstrates the effectiveness of its crew member emergency training and evacuation procedures.
- (b) Prior to conducting an emergency evacuation demonstration, the AOC holder shall apply for and obtain approval from the Authority.
- (c) Cabin crews used in the emergency evacuation demonstrations shall
  - (1) Be selected at random by the Authority;
  - (2) Have completed the AOC holder's Authority-approved training program for the type and model of aircraft: and
  - (3) Have passed the drills and competence check on the emergency equipment and procedures.
  - (4) Be a member of regularly scheduled line cabin crew.
- (d) To conduct the partial emergency evacuation demonstration, the AOC holder's assigned cabin crews shall, using the AOC holder's line operating procedures

- (1) Demonstrate the opening of 50 percent of the required floor-level emergency exits and 50 percent of the required non-floor-level emergency exits (whose opening by a cabin crew is defined as an emergency evacuation duty) and deployment of 50 percent of the exit slides, selected by the Authority; and
  - (2) Prepare for use those exits and slides within 15 seconds.
- (e) To conduct the ditching evacuation demonstration, the AOC holder's assigned cabin crews shall
- (1) Demonstrate their knowledge and use of each item of required emergency equipment;
  - (2) Prepare the cabin for ditching within 6 minutes after the intention to ditch is announced;
  - (3) Remove each life raft from storage (one life raft, selected by the Authority, shall be launched and properly inflated or one slide life raft properly inflated); and
  - (4) Enter the raft (the raft shall include all required emergency equipment) and completely set it up for extended occupancy.

#### **IS: 9.2.3.6 DEMONSTRATION FLIGHTS**

- (a) Each AOC holder shall conduct demonstration flights for each type of aircraft, including those aircraft materially altered in design, and for each kind of operation the AOC holder intends to conduct.

*Definition: "Materially altered aircraft" refers to aircraft having powerplants installed other than those for which it is certified or alterations to the aircraft or its components that materially affect flight characteristics.*

- (b) Each AOC holder shall conduct demonstration flights which contain at least:
- (1) One hundred total hours of flight time, unless the Authority determines that a satisfactory level of proficiency has been demonstrated in fewer hours;
  - (2) Five hours of night time, if night flights are to be authorized;
  - (3) Five instrument approach procedures under simulated or actual instrument weather conditions, if IFR flights are to be authorized; and
  - (4) Entry into a representative number of en route airports, as determined by the Authority
- (c) No person may carry passengers in an aircraft during demonstration flights, except for those needed to make the demonstration flight and those designated by the Authority.
- (d) For those AOC holders of aircraft of less than 5700 kg, the necessity and extent of demonstration shall be at the option of the Authority.

#### **IS: 9.3.1.2 OPERATIONS MANUAL**

- (a) From 1 January 2006, an operations manual, which may be issued in separate parts corresponding to specific aspects of operations, provided in accordance with Subpart 9.3.1.2 shall be organized with the following structure:
- (1) General;
  - (2) Aircraft operating information;
  - (3) Areas, routes and aerodromes; and

- (4) Training.
- (b) An AOC holder may design a manual to be more restrictive than the Authority's requirements.
- (c) Each AOC holder shall ensure that the operations manual presents the items of information listed below, to meet the requirements of Subpart 9.3.1.2 (g). The manual may consist of two or more parts containing together all such information in a format and manner based upon the outline presented in paragraph (d) below. Each part of the operations manual must contain all information required by each group of personnel addressed in that part.
  - (1) General policies.
  - (2) Duties and responsibilities of each crewmember, appropriate members of the ground organization, and management personnel.
  - (3) Reference to appropriate Civil Aviation Regulations.
  - (4) Flight dispatching, supervision and operational control, including procedures for coordinated dispatch or flight control or flight monitoring procedures and maintenance control procedures, as applicable.
  - (5) En route flight, navigation, and communication procedures, including procedures for the dispatch or release or continuance of flight if any item of equipment required for the particular type of operation becomes inoperative or unserviceable en route.
  - (6) Appropriate information from the en route operations specifications, including for each approved route the types of aircraft authorized the type of operation such as VFR, IFR, day, night, etc., and any other pertinent information.
  - (7) Appropriate information from the airport operations specifications, including for each airport-
    - (i) Its location (domestic and flag operations only);
    - (ii) Its designation (regular, alternate, provisional, etc.) (domestic and flag operations only);
    - (iii) The types of aircraft authorized (domestic and flag operations only);
    - (iv) Instrument approach procedures;
    - (v) Landing and takeoff minimums; and
    - (vi) Any other pertinent information.
  - (8) Procedures for familiarizing passengers with the use of emergency equipment, during flight.
  - (9) Emergency equipment and procedures.
  - (10) The method of designating succession of command of flight crew members.
  - (11) Procedures for determining the usability of landing and takeoff areas, and for disseminating pertinent information thereon to operations personnel.
  - (12) Procedures for operating in periods of ice, hail, thunderstorms, turbulence, or any potentially hazardous meteorological condition.
  - (13) Airman training programs, including appropriate ground, flight, and emergency phases.

- (14) Procedures for refueling aircraft, eliminating fuel contamination, protection from fire (including electrostatic protection), and supervising and protecting passengers during refueling.
  - (15) Methods and procedures for maintaining the aircraft weight and centre of gravity within approved limits.
  - (16) Where applicable, pilot and dispatcher route and airport qualification procedures.
  - (17) Accident notification procedures.
  - (18) Procedures and information to assist personnel to identify packages marked or labeled as containing hazardous materials and, if these materials are to be carried, stored, or handled, procedures and instructions relating to the carriage, storage, or handling of Dangerous Goods, including the following:
    - (i) Procedures for determining the proper shipper certification and proper packaging, marking, labeling, shipping documents, compatibility of materials, and instructions on the loading, storage, and handling.
    - (ii) Notification procedures for reporting hazardous material incidents.
    - (iii) Instructions and procedures for the notification of the pilot in command when there are Dangerous Goods aboard.
  - (19) Instruction on the use of autopilots and auto-throttles in IMC.

*Note: Instruction on the use of autopilots and auto throttles, together with IS: 9.3.1.2(c) (20) and (21), are essential for avoidance of approach and landing accidents and controlled flight unto terrain accidents.*
  - (20) Limitation on high rates of descent near the surface.
  - (21) Instructions and training requirements for the avoidance of controlled flight into terrain and policy for the use of the ground proximity warning system (GPWS).
  - (22) Information and policy relating to fatigue management including:
    - (i) rules pertaining to flight time, flight duty period, duty period-limitations and rest requirements for flight and cabin crew members in accordance with Subpart 8.11; and
    - (ii) policy and documentation pertaining to the operator's FRMS in accordance with IS: 8.11.1.2.
  - (23) Other information or instructions relating to safety.
- (d) An operator shall develop policies and procedures for third parties that perform work on its behalf.

## **1.0 ADMINISTRATION AND CONTROL OF OPERATIONS MANUAL**

### **1.1 INTRODUCTION**

- (a) A statement that the manual complies with all applicable Authority regulations and requirements and with the terms and conditions of the applicable Air Operator Certificate.
- (b) A statement that the manual contains operational instructions that are to be complied with by the relevant personnel in the performance of their duties.
- (c) A list and brief description of the various operations manual parts, their contents, applicability and use.

- (d) Explanations and definitions of terms and words used in the manual.

## **1.2 SYSTEM OF AMENDMENT AND REVISION CONTROL**

- (a) An operations manual shall describe who is responsible for the issuance and insertion of amendments and revisions.
- (b) A record of amendments and revisions with insertion dates and effective dates is required.
- (c) A statement that hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety.
- (d) A description of the system for the annotation of pages and their effective dates.
- (e) A list of effective pages and their effective dates.
- (f) Annotation of changes (on text pages and as practicable, on charts and diagrams).
- (g) A system for recording temporary revisions.
- (h) A description of the distribution system for the manuals, amendments and revisions.
- (i) A statement of who is responsible for notifying the Authority of proposed changes and working with the Authority on changes requiring Authority approval.

## **2.0 ORGANIZATION AND RESPONSIBILITIES**

### **2.1 ORGANIZATIONAL STRUCTURE**

A description of the organizational structure including the general company organization and operations department organization. The relationship between the operations department, and the other departments, of the company. In particular, the subordination and reporting lines of all divisions, departments, etc.; which pertain to the safety of flight operations shall be shown.

### **2.2 RESPONSIBLE MANAGER**

The name of each manager responsible for flight operations, the maintenance system, crew training and ground operations shall be listed. A description of their function and responsibilities shall be included.

### **2.3 RESPONSIBILITIES AND DUTIES OF OPERATIONS MANAGEMENT PERSONNEL**

A description of the duties, responsibilities and authority of operations management personnel pertaining to the safety of flight operations and with compliance with applicable regulations shall be listed.

### **2.4 AUTHORITY, DUTIES AND RESPONSIBILITIES OF A PIC**

A statement defining the authority, duties and responsibilities of the PIC shall be listed.

### **2.5 DUTIES AND RESPONSIBILITIES OF CREW MEMBERS OTHER THAN THE PIC**

A statement defining the authority, duties and responsibilities of all required aircraft crew members shall be listed.

### **3.0 OPERATIONAL CONTROL AND SUPERVISION**

#### **3.1 SUPERVISION OF THE OPERATION BY THE AOC HOLDER**

A description of the system for supervision of the operation by the AOC holder shall be listed. This description shall show how the safety of flight operations and the qualifications of personnel involved in such operations are supervised and monitored. In particular, the procedures related to the following items shall be described:

- (a) Competence of operations personnel; and
- (b) Control, analysis and storage of records, flight documents, additional information and safety related data.

#### **3.2 SYSTEM OF PROMULGATION OF ADDITIONAL OPERATIONAL INSTRUCTIONS AND INFORMATION**

A description of any system for promulgating information of which may be of an operational nature but is supplementary to that in the operations manual. The applicability of this information and the responsibilities for its promulgation shall be included.

#### **3.3 FLIGHT SAFETY PROGRAM**

A description of the main aspects of the flight safety program including:

- (a) Programs to achieve and maintain risk awareness by all persons involved in flight operations; and
- (b) Evaluation of accidents and incidents and the promulgation of related information.

#### **3.4 OPERATIONAL CONTROL**

A description of the objectives, procedures and responsibilities necessary to exercise operational control with respect to flight safety.

### **4.0 QUALITY SYSTEM**

A description of the quality system adopted.

### **5.0 CREW COMPOSITION**

#### **5.1 CREW COMPOSITION**

An explanation of the method for determining crew compositions taking into account of the following:

- (a) Experience (total and on type), recency and qualification of the crew members; and
- (b) The designation of the PIC and, if required by the duration of the flight. The procedures for the relief of the PIC or other members of the flight crew.

#### **5.2 DESIGNATION OF THE PIC**

The rules applicable to the designation of a PIC.



**5.3 FLIGHT CREW INCAPACITATION**

Instructions on the succession of command in the event of flight crew incapacitation.

**6.0 QUALIFICATION REQUIREMENTS****6.1 QUALIFICATIONS**

A description of the required license rating(s) qualification/competency (e.g. for routes and airports) experience, training, checking and recent experience requirements for operations personnel to conduct their duties. Consideration shall be given to the aircraft type, kind of operation, and composition of the crew.

**6.2 FLIGHT CREW**

(a) Operation on more than one type or variant.

**6.3 CABIN CREW**

- (a) Senior cabin crew member.
- (b) Cabin crew member.
  - (1) Required cabin crew member;
  - (2) Additional cabin crew member; and
  - (3) Cabin crew member during familiarization flights.
- (c) Operation on more than one type or variant.

**6.4 OTHER OPERATIONS PERSONNEL****7.0 CREW HEALTH PRECAUTIONS****7.1 CREW HEALTH PRECAUTIONS**

The relevant regulations and guidance for crew members concerning health including:

- (a) Alcohol and other intoxicating liquor;
- (b) Narcotics;
- (c) Drugs;
- (d) Sleeping tablets;
- (e) Pharmaceutical preparations;
- (f) Immunization;
- (g) Scuba diving;
- (h) Blood donation;
- (i) Meal precautions prior to and during flight;
- (j) Sleep and rest: and
- (k) Surgical operations.

**8.0 OPERATING PROCEDURES**

**8.1 FLIGHT PREPARATION INSTRUCTIONS**

As applicable to the operation:

**8.1.1 CRITERIA FOR DETERMINING THE USABILITY OF AIRPORTS****8.1.2 EN ROUTE OPERATING MINIMA FOR VFR FLIGHTS**

A description of en route operating minima for VFR flights or VFR portions of a flight and, where single-engine aircraft are used. Instructions for route selection with respect to the availability of surfaces which permit a safe forced landing.

**8.1.3 PRESENTATION AND APPLICATION OF AIRPORT AND EN ROUTE OPERATING MINIMA****8.1.4 INTERPRETATION OF METEOROLOGICAL INFORMATION.**

Explanatory material on the decoding of MET forecasts and MET reports relevant to the area of operations including the interpretation of conditional expressions.

**8.1.5 DETERMINATION OF THE QUANTITIES OF FUEL, OIL AND WATER METHANOL CARRIED.**

The methods by which the quantities of fuel, oil and water methanol to be earned are determined and monitored in flight. This section shall also include instructions on the measurement and distribution of the fluid earned on board. Such instructions shall take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight re-planning and of failure of one or more of the aircraft's power plants. The system for maintaining fuel and oil records shall also be described.

**8.1.6 MASS AND CENTRE OF GRAVITY.**

The general principles of mass and centre of gravity including:

- (a) The policy for using either standard and/or actual masses;
- (b) The method for determining the applicable passenger, baggage and cargo mass;
- (c) The applicable passenger and baggage masses for various types of operations and aircraft type;
- (d) General instruction and information necessary for verification of the various types of mass and balance documentation in use;
- (e) Last minute changes procedures; and
- (f) Seating policy/procedures.

**8.1.7 LIST OF DOCUMENTS, FORMS AND ADDITIONAL INFORMATION TO BE CARRIED DURING A FLIGHT.****8.1.8 FLIGHT AND DUTY TIME****(a) Flight and Duty Time Limitations and Rest Schemes**

- (1) Flight Crew
- (2) Cabin Crew
- (3) Flight Operations Officer/ Flight Dispatcher

**8.2 GROUND HANDLING INSTRUCTIONS****8.2.1 FUELING PROCEDURES.**

A description of fueling procedures including:

- (a) Safety precautions during refueling and de-fueling including when an APU is in operation or when a turbine engine is running and the prop rakes are on;
- (b) Refueling and de-fueling when passengers are embarking, on board or disembarking; and
- (c) Precautions to be taken to avoid mixing fuels.
- (d) Method to ensure required amount of fuel is loaded.

**8.2.2 AIRCRAFT, PASSENGERS AND CARGO HANDLING PROCEDURES RELATED TO SAFETY.**

A description of the handling procedures to be used when allocating seats and embarking and disembarking passengers and when loading and unloading the aircraft. Further procedures, aimed at achieving safety whilst the aircraft is on the ramp, shall also be given. Handling procedures shall include:

- (a) Sick passengers and persons with reduced mobility;
- (b) Permissible size and weight of hand baggage;
- (c) Loading and securing of items in the aircraft;
- (d) Special loads and classification of load compartments (i.e., dangerous goods, live animals, etc.);
- (e) Positioning of ground equipment;
- (f) Operation of aircraft doors;
- (g) Safety on the ramp including fire prevention, blast and suction areas;
- (h) Start-up, ramp departure and arrival procedures;
- (i) Servicing of aircraft;
- (j) Documents and forms;
- (k) Multiple occupancy of aircraft seats.

**8.2.3 PROCEDURES FOR THE REFUSAL OF EMBARKATION.**

Procedures to ensure that persons who appear to be intoxicated or who demonstrate by manner or physical indications that they are under the influence of alcohol or drugs, except medical patients under proper care, are refused embarkation.

**8.2.4 DE-ICING AND ANTI-ICING ON THE GROUND.**

A description of the de-icing and anti-icing policy and procedures for aircraft on the ground. These shall include descriptions of the types and effects of icing and other

contaminants on aircraft while stationary during ground movements and during take-off. In addition, a description of the fluid types used shall be given including:

- (a) Proprietary or commercial names;
- (b) Characteristics;
- (c) Effects on aircraft performance.
- (d) Precautions during usage.

### **8.3 FLIGHT PROCEDURES**

#### **8.3.1 NAVIGATION PROCEDURES**

A description of all navigation procedures relevant to the type(s) and area(s) of operation. Consideration shall be given to:

- (a) Standard navigational procedures including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the aircraft.
- (b) In-flight re-planning; and
- (c) Procedures in the event of system degradation.
- (d) Instructions and training requirements for the use of automatic landing system, HUD or equivalent displays and EVS, SVS or CVS equipment as applicable.
- (e) Allocation of flight crew duties and procedures for the management of crew workload during night and IMC instrument approach operations.

#### **8.3.2 POLICY AND PROCEDURES FOR IN-FLIGHT FUEL MANAGEMENT**

#### **8.3.3 ADVERSE AND POTENTIALLY HAZARDOUS ATMOSPHERIC CONDITIONS.**

Procedures for operating in. and/or avoiding, potentially hazardous atmospheric conditions including:

- (a) Thunderstorms;
- (b) Icing conditions;
- (c) Turbulence.
- (d) Wind-shear;
- (e) Jet stream;
- (f) Volcanic ash clouds;
- (g) Heavy precipitation;
- (h) Sand storms;
- (i) Mountain waves; and
- (j) Significant Temperature inversions.

#### **8.3.4 OPERATING RESTRICTIONS**

- (a) Cold weather operations
- (b) Take-off and landing in turbulence

- (c) Low-level wind-shear operations
- (d) Cross-wind operations (including tail Wind components)
- (e) High temperature operations
- (f) High altitude operations

### **8.3.5 INCAPACITATION OF CREW MEMBERS.**

Procedures to be followed in the event of incapacitation of crew members in flight. Examples of the types of incapacitation and the means for recognizing them shall be included.

### **8.3.6 CABIN SAFETY REQUIREMENTS.**

Procedures covering:

- (a) Cabin preparation for in-flight requirements and preparation for landing including procedures for securing cabin and galleys;
- (b) Procedures to ensure that passengers are seated where, in the event that an emergency evacuation is required, they may best assist and not hinder evacuation from the aircraft;
- (c) Procedures to be Followed during passenger embarkation and disembarkation; and
- (d) Procedures for fuelling with passengers on board, embarking or disembarking.
- (e) Smoking on board.
- (f) Use of portable electronic equipment and cellular telephones.

### **8.3.7 PASSENGER BRIEFING PROCEDURES.**

The contents, means and timing of passenger briefing.

### **8.3.8 PROCEDURES FOR USE OF COSMIC OR SOLAR RADIATION DETECTION EQUIPMENT.**

Procedures for the use of cosmic or solar radiation detection equipment and for recording its readings including actions to be taken in the event that limit values specified in the operations manual are exceeded. In addition the procedures, including ATC procedures, to be followed in the event that a decision to descend or re-route is taken.

## **8.4 ALL WEATHER OPERATIONS**

## **8.5 USE OF THE MINIMUM EQUIPMENT AND CONFIGURATION DEVIATION LIST(S)**

## **8.6 NON REVENUE FLIGHTS**

Procedures and limitations for:

- (a) Training flights;
- (b) Test flights;
- (c) Delivery flights;

- (d) Ferry flights;
- (e) Demonstration flights; and
- (f) Positioning flights including the kind of persons who may be carried on such flights.

## **8.7 OXYGEN REQUIREMENTS**

An explanation of the conditions under which oxygen shall be provided and used.

## **9.0 DANGEROUS GOODS AND WEAPONS**

### **9.1 TRANSPORT OF DANGEROUS GOODS**

Information, instructions and general guidance on the transport of dangerous goods including:

- (a) AOC holder's policy on the transport of dangerous goods;
- (b) Guidance on the requirements for acceptance, labeling, handling, stowage and segregation of dangerous goods;
- (c) Procedures for responding to emergency situations involving dangerous goods;
- (d) Duties of all personnel involved; and
- (e) Instructions on the carriage of the AOC holder's employees.

### **9.2 TRANSPORT OF WEAPONS**

The conditions under which weapons, munitions of war and sporting weapons may be carried.

## **10.0 SECURITY**

### **10.1 SECURITY POLICIES AND PROCEDURES**

A description of security policies and procedures for handling and reporting crime on board such as unlawful interference, sabotage, bomb threats, and hijacking.

### **10.2 SECURITY INSTRUCTIONS AND GUIDANCE**

Security instructions and guidance of a non-confidential nature which shall include the authority and responsibilities of operations personnel.

### **10.3 PREVENTIVE SECURITY MEASURES AND TRAINING**

A description of preventive security measures and training. (Note: Parts of the security instructions and guidance may be kept confidential.)

## **11.0 HANDLING OF ACCIDENTS AND OCCURRENCES**

Procedures for the handling, notifying and reporting of accidents and occurrences. This section shall include:

- (a) Definitions of accidents and occurrences and the relevant responsibilities of all persons involved;
- (b) The descriptions of which company departments, Authorities or other institutions have to be notified by which means and in which sequence in case of an accident;
- (c) Special notification requirements in the event of an accident or occurrence when dangerous goods are being carried;
- (d) A description of the requirements to report specific occurrences and accidents;
- (e) The forms used for reporting and the procedure for submitting them to the Authority shall also be included; and
- (f) If the AOC holder develops additional safety related reporting, procedures for its own internal use, a description of the applicability and related forms to be used.

## **12.0 RULES OF THE AIR**

Rules of the Air including:

- (a) Territorial application of the Rules of the Air;
- (b) The circumstances during which a radio listening watch shall be maintained;
- (c) information and instructions relating to the interception of civil airplanes;
- (d) ATC clearances, adherence to flight plan and position reports;
- (e) The ground/air visual codes for use by survivors, description and use of signal aids; and
- (f) Distress and urgency signals.

## **IS 9.3.1.3 TRAINING PROGRAMS MANUAL**

Each AOC holder and AOC applicant may submit and maintain training program manuals based on the following outline:

### **1.0 TRAINING SYLLABI AND CHECKING PROGRAMS**

#### **1.1 GENERAL REQUIREMENTS**

Training syllabi and checking Programs for all operations personnel assigned to operational duties in connection with the preparation and/or conduct of a flight shall be developed to meet the respective requirements of the Authority. An AOC holder may not use, nor may any person serve in a required crewmember capacity or operational capacity unless that person meets the training and currency requirements established by the Authority for that respective position.

#### **1.2 FLIGHT CREW**

##### **1.2.1 TRAINING SYLLABI**

The training syllabi and checking Programs for flight crew members shall include:

- (a) A written training program acceptable to the Authority that provides for initial, transition, difference, and recurrent training, as appropriate, for flight deck crew members for each type of aircraft flown by that crew member. This written training



program shall include both normal and emergency procedures training applicable for each type of aircraft flown by the crewmember.

- (b) Adequate ground and flight training facilities and properly qualified instructors required to meet training objectives and needs.
- (c) A current list of approved training materials, equipment, training devices, simulators, and other required training items needed to meet the training needs for each type and variation of aircraft flown by the AOC holder.
- (d) Adequate numbers of ground check personnel and flight check pilots to ensure adequate training and flight testing of flight crew members.
- (e) A record system acceptable to the Authority to show compliance with appropriate training and currency requirements.

### 1.2.2 FLIGHT TRAINING PROGRAM

An operator shall establish and maintain a ground and flight training program, approved by the Authority, which ensures that all flight crew members are adequately trained to perform their assigned duties. The training program shall:

- (a) include ground and flight training facilities and properly qualified instructors as determined by the Authority;
- (b) consist of ground and flight training in the type(s) of aircraft on which the flight crew member serves;
- (c) include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by power plant, airframe or systems malfunctions, fire or other abnormalities;
- (d) include upset prevention and recovery training;
- (e) include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, charting, human performance including threat and error management and in the transport of dangerous goods and, where applicable, procedures specific to environment in which the aircraft is to be operated;
- (f) be given on a recurrent basis, as determined by the Authority and shall include an assessment of competence.

### 1.3 CABIN CREW

The training syllabi and checking Programs for cabin crew members shall include:

- (a) Basic initial ground training covering duties and responsibilities.
- (b) Appropriate Authority rules and regulations.
- (c) Appropriate portions of the AOC holder's operating manual.
- (d) Appropriate emergency training as required by the Authority and the AOC holder's operating manual.
- (e) Appropriate flight training.
- (f) Appropriate recurrent, upgrade, or difference training, as required, to maintain currency in both type and any variance the cabin crew member may be required to work in.

- (g) Maintain a training record system acceptable to the Authority to show compliance with all required training.

#### **1.4 ALL AIRCRAFT CREW**

A written training program shall be developed for all aircraft crew members in the emergency procedures appropriate to each make and model of aircraft flown in by the crew member. Areas shall include:

- (a) Instruction in emergency procedures, assignments, and crew co-ordination.
- (b) Individual instruction in the use of onboard emergency equipment such as fire extinguishers, emergency breathing equipment, first aid equipment and its proper use, emergency exits and evacuation slides, and the aircraft's oxygen system including the use of portable emergency oxygen bottles. Flight deck crewmembers shall also practice using their emergency equipment designed to protect them in case of a cockpit fire or smoke.
- (c) Training shall also include instruction in potential emergencies such as rapid decompression, ditching, fire fighting, aircraft evacuation, medical emergencies, hijacking, and disruptive passengers.
- (d) Scheduled recurrent training to meet Authority requirements.

#### **1.5 ALL OPERATIONS PERSONNEL**

The training syllabi and checking Programs for all operations personnel shall include:

- (a) Training in the safe transportation and recognition of all dangerous goods permitted by the Authority to be shipped by air. Training shall include the proper packaging, marking, labeling, and documentation of dangerous articles and magnetized materials.
- (b) All appropriate security training required by the Authority.
- (c) A method of providing any required notification of an accident or incident involving dangerous good.

#### **1.6 OPERATIONS PERSONNEL OTHER THAN AIRCRAFT CREW**

Operations personnel other than aircraft crew (e.g.: flight operations officer, handling personnel etc.), a written training program shall be developed that pertains to their respective duties. The training program shall provide for initial, recurrent, and any required upgrade training.

### **2.0 PROCEDURES FOR TRAINING AND CHECKING**

#### **2.1 PROFICIENCY CHECKING PROCEDURES**

Procedures to be applied in the event that personnel do not achieve or maintain the required standards.

#### **2.2 PROCEDURES INVOLVING THE SIMULATION OF ABNORMAL OR EMERGENCY SITUATIONS.**

Procedures to ensure that abnormal or emergency situations requiring the application of part or all of abnormal or emergency procedures and simulation of IPM by artificial means are not simulated during commercial air transportation flights.

**3.0 DOCUMENT RETENTION****3.1 DOCUMENTATION TO BE STORED AND STORAGE PERIODS**

An AOC holder shall retain all documentation required by appropriate Authority or the Authority of a foreign country in which the AOC holder is operating for the time specified by the respective Authority or for the time period needed to show compliance with appropriate regulations or this operations manual, whichever is longer.

**IS: 9.3.1.4 AIRCRAFT OPERATING MANUAL**

Each AOC applicant and AOC holder should submit and maintain an aircraft operating manual containing at least the following.

**1.0 GENERAL INFORMATION AND UNITS OF MEASUREMENT****1.1 GENERAL INFORMATION**

General Information (e.g. aircraft dimensions), including a description of the units of measurement used for the operation of the aircraft type concerned and conversion tables.

**2.0 LIMITATIONS****2.1 CERTIFICATION AND OPERATIONAL LIMITATIONS**

A description of the certified limitations and the applicable operational limitations including:

- (a) Certification status;
- (b) Passenger seating configuration for each aircraft type including a pictorial presentation;
- (c) Types of operation that are approved (e.g. IFR/VFR, Category II, III, flights in known icing conditions etc.):
- (d) Crew composition;
- (e) Operating within mass and centre of gravity limitations;
- (f) Speed limitations;
- (g) Flight envelopes;
- (h) Wind limits including operations on contaminated runways;
- (i) Performance limitations for applicable configurations;
- (j) Runway slope;
- (k) Limitations on wet or contaminated runways;
- (l) Airframe contamination; and
- (m) Post landing.

**3.0 NORMAL PROCEDURES****3.1 NORMAL PROCEDURES**

The normal procedures and duties assigned to the crew, the appropriate checklists, the system for use of the checklists and a statement covering the necessary co-ordination

procedures between flight and cabin crew. The following normal procedures and duties shall be included:

- (a) Pre-flight:
- (b) Pre-departure and loading:
- (c) Altimeter setting and checking;
- (d) Taxi, Take-Off and Climb;
- (e) Noise abatement;
- (f) Cruise and descent:
- (g) Approach: landing preparation and briefing;
- (h) VFR approach;
- (i) Instrument approach:
- (j) Visual approach and circling:
- (k) Missed approach;
- (l) Normal landing:
- (m) Post landing; and
- (n) Operation on wet and contaminated runways.

### **3.2 SPECIFIC FLIGHT DECK PROCEDURES**

- (a) Determining airworthiness of aircraft
- (b) Obtaining flight release
- (c) Initial cockpit preparation
- (d) Standard operating procedures
- (e) Cockpit discipline
- (f) Standard call-outs
- (d) Communications
- (e) Flight safety
- (f) Push-back and towing procedures
- (g) Taxi guidelines and ramp signals
- (h) Take-off and climb out procedures
- (i) Choice of runway
- (j) Take-off in limited visibility
- (k) Take-off in adverse weather
- (l) Use and limitations of weather radar
- (m) Use of landing lights
- (n) Monitoring of flight instruments
- (o) Power settings for take-off
- (p) Malfunctions during take-off

- (q) Rejected take-off decision
- (r) Climb, best angle best rate
- (s) Sterile cockpit procedures
- (t) En route and holding procedures
- (u) Cruise control
- (v) Navigation log book
- (w) Descent, approach and landing procedures
- (x) Standard call-outs
- (y) Reporting maintenance problems
- (z) How to obtain maintenance and service en route

#### **4.0 ABNORMAL AND EMERGENCY PROCEDURES**

##### **4.1 ABNORMAL AND EMERGENCY PROCEDURES AND DUTIES**

The manual shall contain a listing of abnormal and emergency procedures assigned to crew members with appropriate check-lists that include a system for use of the check-lists and a statement covering the necessary co-ordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties shall be included:

Crew incapacitation;

- (a) Fire and smoke drills;
- (b) Un-pressurized and partially pressurized flight;
- (c) Exceeding structural limits such as overweight landing;
- (d) Exceeding cosmic radiation limits;
- (e) Lightning strikes;
- (f) Distress communications and alerting ATC to emergencies;
- (g) Engine failure;
- (h) System failures;
- (i) Guidance for diversion in case of serious technical failure;
- (j) Ground proximity warning;
- (k) TCAS warning;
- (l) Wind-shear; and
- (m) Emergency landing/ditching;
- (n) Aircraft evacuation;
- (o) Fuel Jettisoning and Overweight Landing:
  - General considerations and policy
  - Fuel jettisoning procedures and precautions
- (p) Emergency Procedures:
  - Emergency descent
  - Low fuel

- Dangerous goods incident or accident
- (q) Interception procedures;
- (r) Emergency signal for cabin crews;
- (s) Communication Procedures;
- (t) Radio listening watch;

## 5.0 PERFORMANCE DATA

Performance data shall be provided in a form in which it can be used without difficulty.

### 5.1 PERFORMANCE DATA

Performance material which provides the necessary data to allow the flight crew to comply with the approved aircraft flight manual performance requirements shall be included to allow the determination of-

- (a) Take-off climb limits - Mass, Altitude, Temperature;
- (b) Take-off field length (dry, wet, contaminated);
- (c) Net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;
- (d) The gradient losses for banked climb outs;
- (e) En route climb limits;
- (f) Approach climb limits;
- (g) Landing climb limits;
- (h) Landing field length (dry, wet, contaminated) including the effects of an in-flight failure of a system or device, if it affects the landing distance;
- (i) Brake energy limits: and
- (j) Speeds applicable for the various flight stages (also considering wet or contaminated runways).

#### 5.1.1 SUPPLEMENTARY PERFORMANCE DATA

Supplementary data covering flights in icing conditions. Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative shall be included.

#### 5.1.2. OTHER ACCEPTABLE PERFORMANCE DATA

If performance data as required for the appropriate performance class is not available in the approved AFM, then other data acceptable to the Authority shall be included. Alternatively, the operations manual may contain cross-reference to the approved data contained in the AFM where such data is not likely to be used often or in an emergency.

## 5.2 ADDITIONAL PERFORMANCE DATA.

Additional performance data where applicable including:

- (a) All engine climb gradients;
- (b) Drift-down data;
- (c) Effect of de-icing/anti-icing fluids;
- (d) Flight with landing gear down;
- (e) For aircraft with 3 or more engines, one engine inoperative ferry flights: and
- (f) Flights conducted under the provisions of a configuration deviation list (CDL).

## **6.0 FLIGHT PLANNING**

### **6.1 FLIGHT PLANNING DATA**

Data and instructions necessary for pre-flight and inflight planning including factors such as speed schedules and power settings. Where applicable, procedures for engine(s) out operations, EDTO and flights to isolated airports shall be included.

### **6.2 FUEL CALCULATIONS**

The method for calculating fuel needed for the various stages of flight.

## **7.0 MASS AND BALANCE**

### **7.1 CALCULATING MASS AND BALANCE**

Instructions and data for the calculation of mass and balance including:

- (a) Calculation system (e.g. Index system):
- (b) Information and instructions for completion of mass and balance documentation, including manual and computer generated types;
- (c) Limiting mass and centre of gravity of the various versions:
- (d) Dry operating mass and corresponding centre of gravity or index.

## **8.0 LOADING**

### **8.1 LOADING PROCEDURES**

Procedures and provisions for loading and securing the load in the aircraft.

### **8.2 LOADING DANGEROUS GOODS**

The operations manual shall contain a method to notify the PIC, when dangerous goods is loaded in the aircraft.

## **9.0 SURVIVAL AND EMERGENCY EQUIPMENT INCLUDING OXYGEN**

### **9.1 LIST OF SURVIVAL EQUIPMENT TO BE CARRIED**

A list of the survival equipment to be carried for the routes to be flown and the procedures for checking the serviceability of this equipment prior to take-off. Instructions regarding the location, accessibility and use of survival and emergency equipment and its associated check list(s) shall also be included.



**9.2 OXYGEN USAGE**

The procedure for determining the amount of oxygen required and the quantity that is available. The flight profile, number of occupants and possible cabin decompression shall be considered. The information provided shall be in a form in which it can be used without difficulty.

**9.3 EMERGENCY EQUIPMENT USAGE**

A description of the proper use of the following emergency equipment:

- (a) Life jackets
- (b) Life rafts
- (c) Medical kits/first aid kits
- (d) Survival kits
- (e) Emergency locator transmitter (ELT)
- (f) Visual signaling devices
- (g) Evacuation slides
- (h) Emergency lighting

**10.0 EMERGENCY EVACUATION PROCEDURES****10.1 INSTRUCTIONS FOR EMERGENCY EVACUATION**

Instructions for preparation for emergency evacuation including, crew co-ordination and emergency station assignment.

**10.2 EMERGENCY EVACUATION PROCEDURES**

A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of the passengers in the event of a forced landing, ditching or other emergency.

**11.0 AIRCRAFT SYSTEMS****11.1 AIRCRAFT SYSTEMS**

A description of the aircraft systems, related controls and indications and operating instructions.

**12.0 ROUTE AND AIRPORT INSTRUCTIONS AND INFORMATION (OPTIONAL FOR THIS MANUAL)****12.1 INSTRUCTIONS AND INFORMATION**

Instructions and information relating to communications, navigation and airports including minimum flight levels and altitudes for each route to be flown and operating minima for each airport planned to be used, including:

- (a) Minimum flight level/altitude;
- (b) Operating minima for departure, destination and alternate airports;

- (c) Communication facilities and navigation aids;
- (d) Runway data and airport facilities;
- (e) Approach, missed approach and departure procedures including noise abatement procedures;
- (f) Communications-failure procedures;
- (g) Search and rescue facilities in the area over which the aircraft is to be flown;
- (h) A description of the aeronautical charts that shall be carried on board in relation to the type of flight and the route to be flown, including the method to check their validity;
- (i) Availability of aeronautical information and meteorological services;
- (j) En route COM/NAV procedures, including holding;
- (k) Airport categorization for flight crew competence qualification.
- (l) The increase of aerodrome operating minima in case of degradation of approach or aerodrome facilities.
- (m) Instruction for determining aerodrome operating minima for instrument approaches using eligible equipment for operational credit.

**IS: 9.3.1.18 PASSENGER BRIEFING CARDS**

- (a) Each AOC holder shall, at each exit seat, provide passenger information cards that include the following information in the primary language in which emergency commands are given by the crew:
  - (1) Functions required of a passenger in the event of an emergency in which a crew member is not available to assist-
    - (i) Locate the emergency exit;
    - (ii) Recognize the emergency exit opening mechanism;
    - (iii) Comprehend the instructions for operating the emergency exit;
    - (iv) Operate the emergency exit,
    - (v) Assess whether opening the emergency exit will increase the hazards to which passengers may be exposed;
    - (vi) Follow oral directions and hand signals given by a crew member,
    - (vii) Stow or secure the emergency exit door so that it will not impede use of the exit;
    - (viii) Assess the condition of an escape slide, activate the slide, and stabilize the slide after deployment to assist others in getting off the slide,
    - (ix) Pass expeditiously through the emergency exit; and
    - (x) Assess, select, and follow a safe path away from the emergency exit
  - (2) A request that a passenger identify himself or herself to allow reseating if he or she-
    - (i) Cannot perform the emergency functions stated in the information card;
    - (ii) Has a non-discernible condition that will prevent him or her from performing the functions;
    - (iii) May suffer bodily harm as the result of performing one or more of those functions; or

- (iv) Does not wish to perform those functions;
- (b) Lacks the ability to read, speak, or understand the language or the graphic form in which instructions are provided by the AOC holder.

**IS: 9.3.1.19 AERONAUTICAL DATA CONTROL SYSTEM**

- (a) Each AOC holder shall provide aeronautical data for each airport used by the AOC holder which includes the following:
  - (1) Airports:
    - (i) Facilities.
    - (ii) Navigational and communications aids.
    - (iii) Construction affecting takeoff, landing, or ground operations.
    - (iv) Air traffic facilities.
  - (2) Runways, clearways, and stopways:
    - (i) Dimensions.
    - (ii) Surface.
    - (iii) Marking and lighting systems.
    - (iv) Elevation and gradient.
  - (3) Displaced thresholds:
    - (i) Location.
    - (ii) Dimensions.
    - (iii) Takeoff or landing or both.
  - (4) Obstacles:
    - (i) Those affecting takeoff and landing performance computations.
    - (ii) Controlling obstacles and charting accuracy.
    - (iii) Instrument flight procedures
    - (iv) Departure procedure.
    - (v) Approach procedure.
    - (vi) Missed approach procedure.
  - (5) Special information:
    - (i) Runway visual range measurement equipment.
    - (ii) Prevailing winds under low visibility conditions.

**IS: 9.3.1.21 WEATHER REPORTING SOURCES**

- (a) The Authority approves and considers the following sources of weather reports satisfactory for flight planning or controlling flight movement:
  - (1) Republic of the Philippines Meteorological Office.
  - (2) Republic of the Philippines-operated automated surface observation stations.

*Note: Some automated systems cannot report all required items for a complete surface aviation weather report.*

- (3) Republic of the Philippines-operated supplemental aviation weather reporting stations.
- (4) Observations taken by airport traffic control towers.
- (5) Republic of the Philippines-contracted weather observatories.
- (6) Any active meteorological office operated by a foreign state which subscribes to the standards and practices of ICAO conventions.

*Note: These meteorological offices are normally listed in the MET tables located in ICAO Regional Air Navigation Plans.*

- (7) Any military weather reporting sources approved by the Authority.

*Note: Use of military sources is limited to control of those flight operations which use military airports as departure, destination, alternate, or diversionary airports.*

- (8) Near real time reports such as pilot reports, radar reports, radar summary charts, and satellite imagery reports made by commercial weather sources or other sources specifically approved by the Authority.
- (9) An AOC holder operated and maintained weather reporting system approved by the Authority.

#### **IS: 9.3.1.22 DE-ICING AND ANTI-ICING PROGRAM**

- (a) Contents of the AOC holder's ground deicing and anti-icing program shall include a detailed description of:
  - (1) How the AOC holder determines that conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft and that ground deicing and anti-icing operational procedures shall be in effect;
  - (2) Who is responsible for deciding that ground deicing and anti-icing operational procedures shall be in effect;
  - (3) The procedures for implementing ground deicing and anti-icing operational procedures; and
  - (4) The specific duties and responsibilities of each operational position or group responsible for getting the aircraft safely airborne while ground deicing and anti-icing operational procedures are in effect.
- (b) Initial and annual recurrent ground training for flight crew and all other affected personnel (e.g. dispatchers/flight operations officers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program specifically covering the following areas:
  - (1) The use of holdover times;
  - (2) Aircraft deicing/anti-icing procedures including inspection and check procedures and responsibilities;
  - (3) Communication procedures;
  - (4) Aircraft surface contamination (i.e., adherence of frost, ice or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics;

- (5) Types and characteristics of deicing/anti-icing fluids;
  - (6) Cold weather pre-flight inspection procedures; and
  - (7) Techniques for recognizing contamination on the aircraft.
- (c) The AOC holder's program shall include procedures for flight crew members to increase or decrease the determined holdover time in changing conditions. The holdover time shall be supported by data acceptable to the Authority. If the maximum holdover time is exceeded, take-off is prohibited unless at least one of the following conditions exists:
- (1) A pre-take-off contamination check is conducted outside the aircraft (within five minutes prior to beginning take-off) to determine that the wings, control surfaces, and other critical surfaces, as defined in the AOC holder's program, are free of frost, ice, or snow;
  - (2) It is otherwise determined by an alternate procedure, approved by the Authority and in accordance with the AOC holder's approved program, that the wings, control surfaces, and other critical surfaces are free of frost, ice, or snow; or
  - (3) The wings, control surfaces, and other critical surfaces are de-iced again and a new holdover time is determined.

#### **IS: 9.3.1.23 FLIGHT MONITORING SYSTEM**

- (a) Each AOC holder shall have an approved flight following system established and adequate for the proper monitoring of each flight, considering the operations to be conducted.
- (b) For AOC holders having flight following centers, these centers shall be located at those points necessary to ensure
  - (1) The proper monitoring of the progress of each flight with respect to its departure at the point of origin and arrival at its destination, including intermediate stops and diversions; and
  - (2) That the PIG is provided with all information necessary for the safety of the flight.
- (c) An AOC holder conducting charter operations may arrange to have flight following facilities provided by persons other than its employees, but in such a case the AOC holder continues to be primarily responsible for operational control of each flight.
- (d) Each AOC holder conducting charter operations using a flight following system shall show that the system has adequate facilities and personnel to provide the information necessary for the initiation and safe conduct of each flight to
  - (1) The flight crew of each aircraft; and
  - (2) The persons designated by the certificate holder to perform the function of operational control of the aircraft.
- (e) Each AOC holder conducting charter operations shall show that the personnel required to perform the function of operational.

#### **IS: 9.4.1.4 MAINTENANCE CONTROL MANUAL**

Each AOC applicant and AOC holder should submit and maintain a maintenance control manual containing at least the following.

*Note: The manual may be put together in any subject order and subjects combined so long as all applicable subjects are covered in this manual.*

## **PART 1.0 ADMINISTRATION AND CONTROL OF THE MAINTENANCE CONTROL MANUAL**

### **1.1 INTRODUCTION**

- (a) A statement that the manual complies with all applicable Authority regulations and requirements and with the terms and conditions of the applicable Air Operator Certificate.
- (b) A statement that the manual contains maintenance and operational instructions that are to be complied with by the relevant personnel in the performance of their duties.
- (c) A list and brief description of the various Maintenance Control Manual parts. Their contents, applicability and use.
- (d) Explanations and definitions of terms and words used in the manual.

### **1.2 SYSTEM OF AMENDMENT AND REVISION**

- (a) A Maintenance Control Manual shall describe who is responsible for the issuance and insertion of amendments and revisions.
- (b) A record of amendments and revisions with insertion dates and effective dates is required.
- (c) A statement that hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety.
- (d) A description of the system for the annotation of pages and their effective dates.
- (e) A list of effective pages and their effective dates.
- (f) Annotation of changes (on text pages and as practicable, on charts and diagrams).
- (g) A system for recording temporary revisions.
- (h) A description of the distribution system for the manuals, amendments and revisions.
- (i) A statement of who is responsible for notifying the Authority of proposed changes and working with the Authority on changes requiring Authority approval.

## **PART 2.0 GENERAL ORGANIZATION**

### **2.1 CORPORATE COMMITMENT BY THE AOC**

### **2.2 GENERAL INFORMATION**

- (a) Brief description of organization
- (b) Relationship with other organizations
- (c) Fleet composition - Type of operation
- (d) Line station locations

### **2.3 MAINTENANCE MANAGEMENT PERSONNEL**

- (a) Accountable Manager

- (b) Nominated Post holder
- (c) Maintenance co-ordination
- (d) Duties and responsibilities
- (e) Organization chart(s)
- (f) Manpower resources and training policy

## **2.4 NOTIFICATION PROCEDURE**

Notification procedure to the Authority regarding changes to the maintenance arrangements locations, personnel, activities, or approval.

## **Part 3.0 MAINTENANCE PROCEDURES**

- 3.1 Aircraft logbook utilization and MEL application
- 3.2 Aircraft maintenance program - development and amendment
- 3.3 Time and maintenance records, responsibilities, retention
- 3.4 Accomplishment and control of mandatory continued airworthiness information (Airworthiness Directives)
- 3.5 Analysis of the effectiveness of the maintenance program
- 3.6 Non-mandatory modification embodiment policy
- 3.7 Major modification standards
- 3.8 Defect reports
  - (a) Analysis
  - (b) Liaison with manufacturer and Regulatory Authority
  - (c) Declared defect policy
- 3.9 Engineering activity
- 3.10 Reliability programs
  - (a) Airframe
  - (b) Propulsion
  - (c) Components
- 3.11 Pre-flight Inspection
  - (a) Preparation for the flight
  - (b) Sub-contracted ground handling functions
  - (c) Security of cargo and baggage loading
  - (d) Control of re-fueling
  - (e) Control of snow, ice, dust, and sand contamination to an approved aviation standard
- 3.12 Aircraft weighing
- 3.13 Flight Test Procedures



- 3.14 Sample documents, tags and forms used
- 3.15 Appropriate portions of AOC holder's operations manual

### **IS 9.7.1.2 (a) SAFETY MANAGEMENT SYSTEM**

This Section outlines framework for the implementation and maintenance of a safety management system (SMS) by an operator or an approved maintenance organization. The framework consists of four components and thirteen elements, and its implementation shall be commensurate with the size of the organization and the complexity of the services provided. This Section also includes a brief description of each element of the framework. Each operator, maintenance organization and AOC applicant may submit and maintain its safety management program based on the following outline:

- 1 Safety policy and objectives
  - 1.1 Management commitment and responsibility
  - 1.2 Safety accountabilities of managers
  - 1.3 Appointment of key safety personnel
  - 1.4 SMS implementation plan
  - 1.5 Coordination of emergency response planning
  - 1.6 Documentation
- 2 Safety risk management
  - 2.1 Hazard identification process
  - 2.2 Risk assessment and mitigation process
- 3 Safety assurance
  - 3.1 Safety performance monitoring and measurement
  - 3.2 The management of change
  - 3.3 Continuous improvement of the SMS
- 4 Safety promotion
  - 4.1 Training and education
  - 4.2 Safety communication

## **1 SAFETY POLICY AND OBJECTIVES**

### **1.1 MANAGEMENT COMMITMENT AND RESPONSIBILITY**

The operator/approved maintenance organization shall define the organization's safety policy which shall be in accordance with international and national requirements, and which shall be signed by the accountable manager of the organization. The safety policy shall reflect organizational commitments regarding safety, including a clear statement about the provision of the necessary human and financial resources for its implementation, and be communicated, with visible endorsement, throughout the organization. The safety policy shall be periodically reviewed to ensure it remains relevant and appropriate to the organization.

### **1.2 SAFETY ACCOUNTABILITIES OF MANAGERS**

The operator/approved maintenance organization shall identify the accountable manager who, irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of the operator/approved maintenance organization, for the implementation and maintenance of the SMS. The operator/approved maintenance organization shall also identify the safety accountabilities of all members of senior management, irrespective of other functions. Safety accountabilities and authorities shall be documented and communicated throughout the organization.

### **1.3 APPOINTMENT OF KEY SAFETY PERSONNEL**

The operator/approved maintenance organization shall identify a safety manager to be the responsible individual and focal point for the implementation and maintenance of the SMS.

### **1.4 SMS IMPLEMENTATION PLAN**

The operator/approved maintenance organization shall develop and maintain an SMS implementation plan that defines the organization's approach to manage safety in a manner that meets the organization's safety needs. The SMS implementation plan of the operator/approved maintenance organization shall explicitly address the coordination between the SMS of the operator/approved maintenance organization and the SMS of other organizations, and the operator/approved maintenance organization must interface with during the provision of services. The SMS implementation plan shall be endorsed by senior management of the organization.

### **1.5 COORDINATION OF EMERGENCY RESPONSE PLANNING**

The operator/approved maintenance organization shall develop, coordinate and maintain an emergency response plan that ensures orderly and efficient transition from normal to emergency operations, and return to normal operations.

### **1.6 DOCUMENTATION**

The operator/approved maintenance organization shall develop and maintain SMS documentation to describe the safety policy and objectives, the SMS requirements, the SMS procedures and processes, the accountabilities, responsibilities and authorities for procedures and processes, and the SMS outputs. As part of the SMS documentation, the operator/approved maintenance organization shall develop and maintain a safety management manual (SMM), to communicate its approach to safety throughout the organization.

## **2 SAFETY RISK MANAGEMENT**

### **2.1 HAZARD IDENTIFICATION PROCESS**

The operator/approved maintenance organization shall develop and maintain a formal process of effectively collecting, recording, acting on and generating feedback about hazards in operation and maintenance activities, based on a combination of reactive, proactive and predictive methods of safety data collection.

### **2.2 RISK ASSESSMENT AND MITIGATION PROCESS**

The operator/approved maintenance organization shall develop and maintain a formal risk management process that ensures analysis (in terms of probability and severity of occurrence), assessment (in terms of tolerability) and control (in terms of mitigation) of risk to an acceptable level. The operator/approved maintenance organization shall also define those levels of management with authority to make decisions regarding safety risks tolerability.

### **3 SAFETY ASSURANCE**

#### **3.1 SAFETY PERFORMANCE MONITORING AND MEASUREMENT**

The operator/approved maintenance organization shall develop and maintain the means to verify the safety performance of the organization compared to the safety policy and objectives, and to validate the effectiveness of safety risks controls. The safety reporting procedures related to safety performance and monitoring shall clearly indicate which types of operational behaviors are acceptable or unacceptable, and include the conditions under which immunity from disciplinary action would be considered.

#### **3.2 THE MANAGEMENT OF CHANGE**

The operator/approved maintenance organization shall develop and maintain a formal process to identify changes within the organization which may affect the established processes and services, to describe the arrangements to ensure safety performance before implementing changes, and to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.

#### **3.3 CONTINUOUS IMPROVEMENT OF THE SMS**

The operator/approved maintenance organization shall develop and maintain a formal process to identify causes of sub-standard performance of the SMS, determine the implications of sub-standard performance in operations, and eliminate such causes.

### **4 SAFETY PROMOTION**

#### **4.1 TRAINING AND EDUCATION**

The operator/approved maintenance organization shall develop and maintain a safety training program that ensures that personnel are trained and competent to perform the SMS duties. The scope of the safety training shall be appropriate to each individual's involvement in the SMS.

#### **4.2 SAFETY COMMUNICATION**

The operator/approved maintenance organization shall develop and maintain formal means of safety communication that ensures that all personnel are fully aware of the SMS; conveys safety critical information; and explains why particular safety actions are taken and why safety procedures are introduced or changed.

**IS 9.7.1.2 (b) ACCEPTABLE LEVEL OF SAFETY**

This Section outlines the acceptable level of a safety related to safety management system (SMS) of an operator, an approved maintenance organization (AMO), or a service provider.

**1 INTRODUCTION**

- 1.1 The introduction of the concept of acceptable level of safety responds to the need to complement the prevailing approach to the management of safety based upon regulatory compliance, with a performance based approach that aims for continuous improvement to the overall level of safety.
- 1.2 Acceptable level of safety expresses the safety goals of an oversight authority, an operator, an AMO, or a service provider. From the perspective of the relationship between oversight authorities and operators/AMOs/service providers, it provides the minimum safety objective(s) acceptable to the oversight authority to be achieved by the operators/AMOs/service providers while conducting their core business functions. It is a reference against which the oversight authority can measure safety performance.
- 1.3 Establishing acceptable level(s) of safety for the safety program does not replace legal, regulatory, or other established requirements, nor does it relieve the Authority from its obligations regarding the Convention on International Civil Aviation and its related provisions.
- 1.4 Establishing acceptable level(s) of safety for the safety management system does not relieve operators/AMOs/service providers from their obligations under these Regulations and the Convention on International Civil Aviation.

**2 SCOPE**

- 2.1 Different acceptable levels of safety may be established between the Authority and individual operators/service providers.
- 2.2 Each agreed established level of safety should be commensurate with the complexity of individual operator/AMO/service provider operational contexts, and the level to which safety deficiencies can be tolerated and realistically addressed.

**3 IMPLEMENTATION**

- 3.1 The concept of acceptable level of safety is expressed in terms of safety performance indicators and safety performance targets, and implemented through safety requirements.
- 3.2 The relationship between acceptable level of safety, safety performance indicators, safety performance targets and safety requirements is as follows:
  - acceptable level of safety is the overarching concept;
  - safety performance indicators are the measures or metrics to determine if the acceptable level of safety has been achieved;
  - safety performance targets are the quantified objectives pertinent to the acceptable level of safety; and
  - safety requirements are the tools or means required to achieve the safety performance targets.

- 3.3 The safety performance indicators of an acceptable level of safety should be uncomplicated and linked to major components of State safety program, or an operator/AMO/service provider safety management system (SMS). They are generally expressed in numerical terms.
- 3.4 The safety performance targets of an acceptable level of safety should be determined after weighing what is desirable and what is realistic for individual operators/AMOs/service providers. Safety performance targets should be measurable, acceptable to the parties involved, and consistent with the acceptable level of safety.
- 3.5 The safety requirements to achieve the safety performance targets of an acceptable level of safety should be expressed in terms of operational procedures, technology an systems, programs, contingency arrangements and so forth, to which measure of reliability, availability and/or accuracy may be added.
- 3.6 An acceptable level of safety should be expressed by several safety performance indicators and translated into several safety performance targets, rather by single ones.