

THE SIERRA LEONE CIVIL AVIATION REGULATIONS



PART 26 - AIR OPERATOR CERTIFICATION AND ADMINISTRATION

DECEMBER 2022

PREAMBLE

WHEREAS, The Director-General shall have power to perform such acts, -including the conduct of investigations, to issue and amend orders, rules, regulations and procedures pursuant to and in accordance with the Civil Aviation Act, 2019.

WHEREAS, the Director- General shall have power to publish all reports, orders, decisions, rules, and regulations issued under Civil Aviation Act, 2019 in such form and manner as may be best adapted for public information and use;

NOW THEREBY, The Director General under its powers given by Article 17(1) and 17(2) (a) of the Civil Aviation Act, 2019 issue the following regulations which supersedes previous regulations on Air Operator Certification and Administration.

1. SHORT TITLE

This Regulation may be cited as Sierra Leone Civil Aviation Regulation “SLCAR Part 26 – Air Operator Certification and Administration”.

2. EFFECTIVE DATE

This Regulation shall come into force as of the 21st day of December 2022.



Dr Moses Tiffa Baió
Director General

INTRODUCTION

Part 26 of the Sierra Leone Civil Aviation Regulations (SLCARs) presents the regulatory requirements for persons or organisations to be granted an air operator certificate (AOC) by the Sierra Leone Civil Aviation Authority and includes regulations concerning flight operations management, continuing airworthiness requirements, security management, and dangerous goods management and shipping.

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1. GENERAL

In transposing the ICAO Annexes below, the following amendments have been taking into considerations;

- (a) Annex 6 Volume I – Amendment 1-48
- (b) Annex 6 Volume II – Amendment 1-40
- (c) Annex 6 Volume II – Amendment 1-24
- (d) Annex 8 – Amendment 1-109
- (e) Annex 17 – Amendment 1-18
- (f) Annex 19 – Amendment 1

1.1 Applicability

This Part prescribes the requirements for the carriage by air of passengers, cargo, or mail for remuneration or hire by persons or organisations whose principal place of business or permanent residence is located in Sierra Leone.

Except where specifically noted, this Part applies to all commercial air transport operations by AOC holders for which Sierra Leone is the State of the Operator under the definitions provided in SLCARs Part 6.

1.2 Definitions

Definitions are contained in SLCARs Part 6A, 8A, 8B and 22.

1.3 Abbreviations

The following abbreviations are used in this Part:

- AC** – Advisory Circular
- ACAS** – airborne collision avoidance system
- AD** – Airworthiness Directive
- AFM** – Aircraft Flight Manual
- AMO** – approved maintenance organisation
- AMT** – aviation maintenance technician
- AOC** – air operator certificate
- AOM** – Aircraft Operating Manual
- ATC** – air traffic control
- ATPL** – air transport pilot licence
- ATS** – air traffic service
- CAST** – Commercial Aviation Safety Team
- CAT I** – Category I
- CAT II** – Category II
- CAT III** – Category III
- CDL** – configuration deviation list
- DH** – decision height
- EDTO** – extended diversion time operation
- EFB** – electronic flight bag
- EVS** – enhanced vision system

FDAP – flight data analysis programme
FDR – flight data recorder
FOO – flight operations officer
FRMS – fatigue risk management system
HUD – head-up display
ICAO – International Civil Aviation Organization
IMC – instrument meteorological conditions
IS – Implementing Standard
MCM – Maintenance Control Manual
MEL – minimum equipment list
OM – Operations Manual
PBN – performance-based navigation
PIC – pilot-in-command
RFFS – rescue and firefighting service
RNP – required navigation performance
RVR – runway visual range
SMM – Safety Management Manual
SMS – safety management system
SOP – standard operating procedure
ULD – unit load device
VFR – visual flight rules

1.4 Exemption Authority

- (a) The Authority may, upon consideration of the circumstances of a particular operator, issue an exemption providing relief from specified sections of this Part, provided that the Authority finds that the circumstances presented warrant the exemption and that a level of safety will be maintained equal to that provided by the rule from which the exemption is sought.
- (b) The Authority may terminate or amend an exemption at any time.
- (c) A request for exemption shall be made in accordance with the requirements of SLCAR Part 22.
- (d) Each operator that receives an exemption shall have a means of notifying the appropriate management and personnel of the exemption.

2. AIR OPERATOR CERTIFICATE

2.1 Applicability

This chapter prescribes the requirements for the certification of an air operator and the continued validity of the AOC issued by the Sierra Leone Civil Aviation Authority.

2.2 General

- (a) No person or organisation may operate as a certificated air operator without, or in violation of, an AOC and its associated operations specifications issued under this

Regulation.

- (b) Each certificated air operator shall, at all times, continue in compliance with the AOC terms, conditions of issuance, and continuing airworthiness requirements in order to hold that certificate. Failure to comply may result in the revocation or suspension of the AOC.
- (c) Each certificated air operator shall develop policies and procedures for third parties that perform work on its behalf.

2.3 Contents of an AOC

- (a) The AOC issued to an air operator by the Sierra Leone Civil Aviation Authority will consist of two documents:
 - (i) A one-page certificate for public display signed by the Authority; and
 - (ii) Operations specifications signed by the accountable manager and the Authority.
- (b) The certificate will contain the following items and will be issued on a form and in a manner as prescribed in IS 2.3(B):
 - (i) The State of the Operator and the Issuing Authority;
 - (ii) The AOC number and its expiration date;
 - (iii) The operator's name, trading name (if different), and address of the principal place of business;
 - (iv) Telephone, facsimile, and email;
 - (v) The location, in a controlled document carried on board, where the contact details of operational management can be found; and
 - (vi) The date of issue and the name, signature, and title of the Authority representative.
- (c) The operations specifications will contain the following and will be issued on a form and in a manner as prescribed in IS 2.3(C):
 - (i) The Issuing Authority contact details;
 - (ii) The operator's name, trading name (if different), and AOC number;
 - (iii) The date of issue and signature of the Authority representative;
 - (iv) The make, Sierra Leone, and series of each aircraft in the operator's fleet;
 - (v) Types and areas of operation; and
 - (vi) The special limitations and specific approvals.
- (d) When the AOC and associated operations specifications are issued by the State of the Operator in a language other than English, an English translation will be included.
- (e) Each AOC holder shall carry on board its aircraft a certified true copy of the AOC and a copy of the associated operations specifications relevant to the aircraft.

2.4 Advertising

- (a) No person or organisation may advertise as a certificated air operator under this Part until the Sierra Leone Civil Aviation Authority has issued an AOC and associated operations specifications to that person or organisation.

- (b) No certificated air operator may make, either orally or in writing, any statement about itself that is false or designed to mislead any person.
- (c) Whenever the advertising of an air operator indicates that the air operator is certificated under this Part, the advertisement shall clearly state the AOC number.

2.5 Application for an AOC

- (a) An application for an AOC shall be made in a form and manner prescribed by the Authority.
- (b) Each applicant shall submit an application for the initial issue of an AOC at least 90 days before the date of intended operations.
- (c) At the time of application, the applicant shall provide all the information and manuals required under this Regulation, the SMS documentation required by Part 22 of these regulations, and any additional information the Authority requires the applicant to submit.

2.6 Issuance or Denial of an AOC

- (a) The issue of an AOC by the Sierra Leone Civil Aviation Authority will be dependent upon the operator demonstrating compliance with the requirements of this Part and the relevant safety management requirements of Part 22 of these regulations, and any additional information required by the Authority.
- (b) The Authority may issue an AOC if, after investigation, the Authority finds that the applicant:
 - (i) Is a citizen of Sierra Leone;
 - (ii) Has its principal place of business and its registered office, if any, located in Sierra Leone;
 - (iii) Meets the applicable regulations and standards for the holder of an AOC;
 - (iv) Is properly and adequately equipped for safe operations in commercial air transport and maintenance of its aircraft; and
 - (v) Holds the economic authority issued by Sierra Leone under the provisions of the Civil Aviation Act, 2019, as amended.
- (c) The Authority may deny an application for an AOC if it finds that:
 - (i) The applicant is not properly or adequately equipped, is not able to conduct safe operations in commercial air transport, or is not able to maintain its aircraft;
 - (ii) The applicant previously held an AOC that was revoked; or
 - (iii) A person who contributed to the circumstances causing the revocation process of an AOC obtains a substantial ownership in the applicant or is employed by the applicant in a position required by this Regulation.

2.7 Duration and Renewal of an AOC

- (a) An AOC, or any portion of an AOC, issued by the Authority is effective for 12 months unless:
 - (i) The Authority amends, suspends, revokes, or otherwise terminates the certificate;
 - (ii) The AOC holder surrenders the certificate to the Authority; or

- (iii) The AOC holder suspends operations for more than 60 days.
- (b) An AOC holder shall make application for renewal of an AOC at least 30 days before the end of the existing period of validity.

2.8 Continued Validity of an AOC

- (a) Unless an AOC has previously been surrendered, superseded, suspended, or revoked, or has expired by virtue of exceeding any expiration date that may be specific in the certificate, the continued validity of the AOC issued by the Sierra Leone Civil Aviation Authority shall depend on:
 - (i) The operator maintaining the requirements of the original certification, as amended, under the supervision of the Sierra Leone Civil Aviation Authority; and
 - (ii) The operator remaining in compliance with the requirements of this Part and the relevant safety management requirements of Part 22 of these regulations, and any additional information required by the Authority.

2.9 Access for Inspection

- (a) At any time or place, the Authority may conduct an inspection or test to determine whether an AOC holder certificated under this Part is in continued compliance with The Civil Aviation Act, 2019, as amended, the applicable regulations, the AOC, or the AOC holder's operations specifications.
- (b) Each AOC holder shall:
 - (i) Grant the Authority access to and cooperation with any of the AOC holder's organisations, facilities, and aircraft;
 - (ii) Ensure that the Authority is granted access to and cooperation with any organisation or facilities that the AOC holder has contracted for services associated with commercial air transport operations or maintenance; and
 - (iii) Grant the Authority free and uninterrupted access to the flight deck of the aircraft during flight operations.
- (c) Each AOC holder 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.

2.10 Authority to Inspect

- (a) The Authority will conduct ongoing validation of the AOC holder's continued eligibility to hold its AOC and associated operations specifications.
- (b) The Authority may conduct tests and inspections, at any time or place, to determine the AOC holder's continued compliance with The Civil Aviation Act, 2019, as amended, and these regulations and the specific approvals, conditions, and limitations issued to the AOC holder.
- (c) The AOC holder shall make available at its main base of operations:
 - (i) All portions of its current AOC;
 - (ii) All portions of its OM and MCM; and
 - (iii) A current listing that includes the location of, and the person(s) responsible for,

each record, document, and report required to be kept by the AOC holder under The Civil Aviation Act, 2019, as amended, and these regulations.

- (d) Failure by any AOC holder to make available to the Authority, upon request, all portions of the AOC, OM, MCM, and any required record, document, or report is grounds for suspension of all or part of the AOC.

2.11 Amendment of an AOC

- (a) The Authority may amend any AOC if:
 - (i) The Authority determines that safety in commercial air transport and the public interest require the amendment; or
 - (ii) The AOC holder applies for an amendment and the Authority determines that safety in commercial air transport and the public interest allow the amendment.
- (b) If the Authority stipulates in writing that an emergency exists requiring immediate amendment of the AOC in the public interest with respect to safety in commercial air transport, such an amendment is effective without stay on the date the AOC holder receives notice.
- (c) An AOC holder may appeal an amendment but shall operate in accordance with the amendment unless it is subsequently withdrawn.
- (d) Amendments proposed by the Authority, other than emergency amendments, become effective 30 days after notice to the AOC holder, unless the AOC holder 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 AOC holder shall be made at least 30 days prior to the intended date of any operation under that amendment.
- (f) No person or organisation may perform a commercial air transport operation for which an AOC amendment is required unless that person or organisation has received notice of the approval from the Authority.

3. AOC ADMINISTRATION

3.1 Applicability

This section prescribes the requirements for the administration of an AOC holder, including the AOC holder's organisational structure, policy and procedures, facilities, management personnel, aircraft to be used, quality system, SMS, record keeping and documents systems, and operational or emergency demonstrations.

3.2 General

3.2.1 Main Base of Operations

- (a) Each AOC holder that is not authorised to conduct maintenance under its AOC shall maintain a main base of operations.
- (b) Each AOC holder that is authorised to conduct maintenance under its AOC shall maintain a main base of operations and a main base of maintenance.
- (c) An AOC holder may establish a main base of operations and a main base of maintenance at the same location or at separate locations.

- (d) Each AOC holder 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.

3.2.2 Management Personnel Required for Commercial Air Transport Operations

- (a) Each AOC holder 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 required by the Authority.
- (b) Each AOC holder shall have qualified personnel, with proven competency in civil aviation, available and serving full-time in the following positions or their equivalent:
 - (i) Director of Operations;
 - (ii) Chief pilot;
 - (iii) Director of Safety;
 - (iv) Director of Maintenance; and
 - (v) Chief inspector.
- (c) The Authority may approve positions or numbers of positions other than those listed in paragraph 3.2.2(b) if the AOC holder is able to show that it can perform the operations with the highest degree of safety under the direction of fewer or different categories of management personnel due to:
 - (i) The types of operation involved;
 - (ii) The number and type of aircraft used; and
 - (iii) The areas of operation.
- (d) Additional management personnel requirements are contained in IS 3.2.2.
- (e) The persons who serve in the positions required or approved under 3.2.2 and any person in a position to exercise control over operations conducted under the AOC shall:
 - (i) Be qualified through training, experience, and expertise;
 - (ii) Discharge their duties to meet applicable legal requirements and to maintain safe operations; and
 - (iii) To the extent of their responsibilities, have a full understanding of the following materials with respect to the AOC holder's operation:
 - (1) Aviation safety standards and safe operating practices;
 - (2) Sierra Leone Civil Aviation Regulations;
 - (3) The AOC holder's operations specifications;
 - (4) All appropriate maintenance and airworthiness requirements of this Part; and
 - (5) The manuals required by this Part.
- (f) Each AOC holder shall:
 - (i) State in the general policy provisions of its OM the duties, responsibilities, and authority of the positions required in 3.2.2;

- (ii) List in its OM the names and business addresses of the persons assigned to those positions; and
- (iii) Notify the Authority within 10 days of any change in personnel or any vacancy in any position listed.

3.2.3 Quality System

- (a) Each AOC holder shall establish a quality system and designate a quality manager to monitor compliance with, and the 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 AOC holder shall ensure that the quality system includes a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with all applicable requirements, standards, and procedures.
- (c) The quality system and the quality manager shall be acceptable to the Authority.
- (d) Each AOC holder shall describe its quality system in relevant documentation, as prescribed in IS 3.2.3.
- (e) Notwithstanding paragraph 3.2.3(a), the Authority may accept the nomination of two quality managers, one for operations and one for maintenance; provided that the AOC holder has designated one Quality Management Unit to ensure that the quality system is applied uniformly throughout the entire operation.
- (f) Where the AOC holder is also an AMO, the AOC holder's quality system may be combined with the requirements of an AMO and submitted for acceptance to the Authority and, for aircraft not registered in Sierra Leone, to the State of Registry.

3.2.4 Submission and Revision of Policy and Procedure Manuals

- (a) Each manual required by this Part shall:
 - (i) Include instructions and information necessary to allow the personnel concerned to perform their duties and responsibilities with a high degree of safety;
 - (ii) Be in a form that is easy to revise;
 - (iii) Contain a system that allows personnel to determine the current revision status of each manual;
 - (iv) Have the date of the last revision on each page concerned;
 - (v) Not be contrary to any applicable Sierra Leone Regulation or the AOC holder's operations specifications; and
 - (vi) Include references to appropriate regulations.
- (b) No person may cause the use of any policy or procedure for flight operations or airworthiness functions prior to coordination with the Authority.
- (c) The AOC holder shall submit each proposed policy or procedure to the Authority at least 30 days prior to the date of intended implementation.

3.2.5 Retention of Records

- (a) Each AOC holder shall retain the following records for the period prescribed in IS

3.2.5:

(i) Flight crew records, including:

- (1) Flight, duty, and rest time;
- (2) Licence and medical certificate;
- (3) Ground and flight training (all types);
- (4) Route and aerodrome/heliport qualification training;
- (5) Dangerous goods training;
- (6) Security training; and
- (7) Proficiency and qualification checks (all types).

(ii) Cabin crew records, including:

- (1) Flight, duty, and rest time;
- (2) Licence, if applicable;
- (3) Ground and flight training (all types) and qualification checks;
- (4) Dangerous goods training;
- (5) Security training; and
- (6) Competency checks.

(iii) AOC holder personnel records, including:

- (1) Training and qualification of other personnel for whom an approved training programme is required in these regulations;
- (2) Licence, if required, and medical certificate, if required; and
- (3) Proficiency or competency checks, if required.

(iv) Flight preparation forms, including:

- (1) Completed load manifests;
- (2) Mass and balance reports;
- (3) Dispatch releases;
- (4) Flight plans;
- (5) Passenger manifests; and
- (6) Weather reports.

(v) An aircraft technical log, including:

- (1) Journey records section;
- (2) Maintenance records section; and
- (3) Flight recorder records:
 - a) Cockpit voice recordings; and
 - b) Flight data records.

(vi) Aircraft maintenance records, including:

- (1) The total time in service (hours, calendar time, and cycles, as appropriate) of the aircraft and all life-limited parts;
- (2) The current status of compliance with all mandatory continuing airworthiness information;
- (3) Appropriate details of modifications and repairs to the aircraft and aeronautical products;
- (4) The total time in service (hours, calendar time, and cycles, as appropriate) since the last overhaul of the aircraft or aeronautical products subject to a mandatory overhaul life; and
- (5) Detailed maintenance records to show all requirements for approval to return to service have been met.

(vii) Other records, including:

- (1) Operational flight plan;
- (2) Quality system records;
- (3) Dangerous goods transport documents;
- (4) Dangerous goods acceptance checklists; and
- (5) Records on cosmic and solar radiation dosage, if the AOC holder operates aircraft that fly above 15 000 m.

(b) For the records identified in paragraphs 3.2.5(a)(1), (2), and (3), the AOC holder shall maintain:

- (i) Current records that detail the qualifications and training of all its personnel and contract employees involved in the operational control, flight operations, ground operations, and maintenance of the air operator; and
- (ii) In sufficient detail to determine whether the persons meet the experience and qualification requirements for duties in commercial air transport operations, records for those employees performing crew member or FOO duties.

(c) Each AOC holder shall maintain records in a manner acceptable to the Authority.

3.2.6 Cockpit Voice Recorder and Flight Data Recorder Records

(a) Each AOC holder shall retain:

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

- (b) In the event of an accident or incident requiring immediate notification to the Authority, the AOC holder shall remove and keep recorded information from the cockpit voice recorder and FDR for at least 60 days or, if requested by the Authority, for a longer period.

3.2.7 Aircraft Operated by the AOC Holder

- (a) The AOC holder shall list in its operations specifications the following:
 - (1) Issuing Authority contact details;
 - (2) Operator name and AOC number;
 - (3) Date of issue and signature of the Authority representative;
 - (4) Aircraft make, model, and series;
 - (5) Types and areas of operation; and
 - (6) The special limitations and specific approvals issued.
- (b) Each AOC holder shall apply to the Authority for an amendment to its operations specifications in advance of any intended change of aircraft.
- (c) Aircraft of another certificate holder operated under an interchange agreement shall be incorporated into the AOC holder's operations specifications as required by paragraph 3.2.7(a).

3.2.8 Aircraft Technical Log

Each AOC holder shall have an aircraft technical log that is carried on the aircraft and contains a journey records section and an aircraft maintenance records section. The journey records section is further described in 4.1.5, and the aircraft maintenance records section is further described in 5.1.9.

3.2.9 Company Procedures Indoctrination

- (a) No person may serve as an AOC holder's employee, nor may any AOC holder employ a person, unless that person has completed the approved company indoctrination curriculum appropriate to that person's duties and responsibilities.
- (b) The indoctrination curriculum shall include training in knowledge and skills related to human performance, including coordination with other air operator personnel.

3.2.10 Safety Management System

- (a) An AOC holder shall implement an SMS acceptable to the Authority as outlined in SLCARs Part 19.
- (b) An AOC holder operating an aeroplane with a maximum certificated take-off mass over 27 000 kg (44 092 lbs.) shall establish and maintain an FDAP for the use and guidance of operational personnel as part of its SMS.
- (c) An AOC holder operating a helicopter with a maximum certificated take-off mass over 7 000 kg or having a passenger seating configuration of more than nine and fitted with an FDR shall establish and maintain an FDAP for the use and guidance of operational personnel as part of its SMS.
- (d) The AOC holder's FDAP shall be non-punitive and shall contain adequate safeguards to protect the source(s) of data.

3.2.11 Flight Safety Documents System

- (a) An AOC holder shall establish a flight safety documents system for the use and guidance of operational personnel as part of its SMS.
- (b) An AOC holder's flight safety documents system shall contain the minimum elements of the outline prescribed in IS 3.2.11.

3.3 Aircraft

3.3.1 Authorised Aircraft

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

3.3.2 Dry Leasing of Foreign-Registered Aircraft

- (a) An AOC holder may dry lease a foreign-registered aircraft for commercial air transport as authorised by the Authority.
- (b) No person may be authorised to operate a foreign-registered aircraft unless:
 - (i) There is in existence a current agreement between the Authority and the State of Registry that, while the aircraft is operated by the Sierra Leone AOC holder, the operations regulations of Sierra Leone are applicable; and
 - (ii) There is in existence a current agreement between the Authority and the State of Registry acknowledging that:
 - (1) While the aircraft is operated by the AOC holder, the airworthiness regulations of the State of Registry are applicable; or
 - (2) If the State of Registry agrees to transfer some or all of the responsibility for airworthiness to the Sierra Leone Civil Aviation Authority under Article 83 *bis* of the Chicago Convention, the airworthiness regulations of Sierra Leone shall apply to the extent agreed upon by the Authority and the State of Registry.
 - (iii) The Authority of the State of Registry shall have free and uninterrupted access to the aircraft at any place and at any time.
- (c) Additional requirements for dry leasing of foreign-registered aircraft are prescribed in IS 3.3.2.

3.3.3 Aircraft Interchange

- (a) No AOC holder may interchange aircraft with another AOC holder without the approval of the Authority.

- (b) Requirements pertaining to aircraft interchange agreements approved by the Authority are prescribed in IS 3.3.3.

3.3.4 Wet Leasing

- (a) No person or organisation may conduct wet lease operations on behalf of another AOC holder except in accordance with the applicable laws and regulations of the country in which the operation occurs and in accordance with the specific approvals, conditions, and limitations imposed by the Sierra Leone Civil Aviation Authority.
- (b) No person or organisation may allow another AOC holder to conduct wet lease operations on its behalf unless:
 - (i) That person or organisation holds an AOC from a Contracting State that authorises those operations; and
 - (ii) The AOC holder advises the Sierra Leone Civil Aviation Authority of such operations and provides a copy of the AOC under which the operation is to be conducted
- (c) Additional requirements for wet leasing aircraft are prescribed in IS 3.3.4.

3.3.5 DAMP LEASING

Damp lease. A wet lease of an aircraft where the aircraft is operated under the AOC of the lessor, with the flight crew and possibly part of the cabin crew being provided by the lessor, and part or all of the cabin crew provided by the lessee;

- (a) No person shall conduct damp-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 shall allow another entity or air operator to conduct damp-lease operations on its behalf unless:
 - (i) That air operator holds an AOC or its equivalent from a Contracting State that authorises those operations; and
 - (ii) The AOC holder advises the Authority of such operations and provides a copy of the AOC under which the operation is to be conducted.
- (c) The operational control and the qualification of the crew are in compliance with the requirements of the lessor's AOC and or operations policies for the duration of the lease.
- (d) The State of the lessor has Safety oversight.
- (e) The crew combination shall be specified in the contract or agreement.
- (f) Additional requirements for damp leasing of aircrafts are specified in IS: 3.3.4.

3.3.5 Emergency Evacuation Demonstration

- (a) No person shall use an aircraft type and model in passenger-carrying commercial air transport operations unless that person has first conducted for the Authority an actual full-capacity emergency evacuation demonstration for the configuration in 90 seconds or less.
- (b) The actual full-capacity emergency evacuation demonstration may not be required if

the AOC holder provides a written petition for deviation with evidence that:

- (i) 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
 - (ii) There is an engineering analysis that shows that an evacuation is still possible within the 90-second standard if the AOC holder's aircraft configuration differs with regard to the number of exits or the exit type or the number of cabin crew members or the location of the cabin crew members.
- (c) If a full-capacity emergency evacuation demonstration is not required, no person may use an aircraft type and model in passenger-carrying commercial air transport operations unless that person has first demonstrated to the Authority that its available personnel, procedures, and equipment will provide sufficient open exits for evacuation in 15 seconds or less.
- (d) No person shall use a land aeroplane in extended overwater operations unless that person has first conducted a ditching evacuation demonstration to the Authority showing that it has the ability and equipment to efficiently carry out its ditching procedures.
- (e) Additional requirements concerning emergency evacuation demonstrations are prescribed in IS 3.3.5.

3.3.6 Demonstration Flights

- (a) No person may operate an aircraft type in commercial air transport unless that person 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 specialised navigation system, unless that person conducts a satisfactory demonstration flight for the Authority.
- (c) Demonstration flights required by paragraph 3.3.6(a) shall be conducted in accordance with the regulations applicable to the type of operation and aircraft used.
- (d) The number of hours and the type of demonstration flights shall be conducted in accordance with IS 3.3.6.

3.4 Facilities and Operations Schedules

3.4.1 Facilities

- (a) Each AOC holder shall maintain operational and airworthiness support facilities at its main base of operations, appropriate for the type(s) and area(s) of operation.
- (b) Each AOC holder shall arrange appropriate ground handling facilities at each aerodrome used to ensure the safe servicing and loading of its flights.
- (c) No AOC holder may commence a flight unless it has ascertained by every reasonable means available that the ground and/or water facilities available and directly required on such flight, for the safe operation of the aircraft and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.
- (d) Each AOC holder shall ensure that any inadequacy of facilities observed in the course of

operations is reported to the authority responsible without delay.

- (e) Each AOC holder shall, as part of its SMS, assess the level of RFFS protection available at any aerodrome intended to be specified in the operational flight plan in order to ensure that an acceptable level of protection is available for the aircraft intended to be used.
- (f) Each AOC holder shall include in its OM information related to the level of RFFS protection that is deemed acceptable.

3.4.2 Operations Schedules

In establishing flight operations schedules, each AOC holder 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 the cruising speed of the type of aircraft used. This cruising speed may not be more than that resulting from the specified cruising output of the engines.

4. AOC FLIGHT OPERATIONS MANAGEMENT

4.1 Applicability

This section provides those certification requirements that apply to the management of flight operations personnel and their functions.

4.2 Operations Manual

- (a) Each AOC holder shall issue, to crew members and persons assigned operational control functions, an OM acceptable to the Authority.
- (b) The OM shall contain the overall (general) company policies and procedures regarding the flight operations the AOC holder conducts.
- (c) Each AOC holder shall prepare and keep current an OM that contains the AOC holder's policies and procedures for the use and guidance of its personnel.
- (d) Each AOC holder shall issue the OM or pertinent portions of the OM, together with all amendments and revisions, to all personnel that are required to use it.
- (e) No AOC holder may provide for use by its personnel in commercial air transport any OM or portion of an OM that has not been reviewed and found acceptable or approved for the AOC holder by the Authority.
- (f) Each AOC holder shall ensure that the contents of the OM include at least those subjects designated by the Authority that are applicable to the AOC holder's operations.
- (g) The OM shall contain the specific areas listed below and may be issued in separate parts:
 - (i) General, as prescribed in IS 4.2(G);
 - (ii) AOM, as prescribed in 4.4 of this Part and in IS 4.4;
 - (iii) Route Guide – Areas, Routes, Aerodromes, and Heliports, as prescribed in 4.1.20 of this Part and in IS 4.20; and
 - (iv) Training Manual, as prescribed in 4.3 of this Part and in IS 4.3.

4.3 Training Manual

- (a) Each AOC holder 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 AOC holder shall have a Training Manual approved by the Authority containing the general training, checking, and record keeping policies.
- (c) Each AOC holder shall have approval of the Authority prior to using a training curriculum for the purpose of qualifying a crew member, or a person performing operational control functions, for duties in commercial air transport.
- (d) Each AOC holder shall submit to the Authority any revision to an approved training programme and shall receive written approval from the Authority before that revision may be used.
- (e) The Training Manual shall conform to the outline prescribed in IS 4.3.

4.4 Aircraft Operating Manual

- (a) Each AOC holder shall, for each type and variant of aircraft operated, submit for approval by the Authority a proposed AOM containing the normal, abnormal, and emergency procedures relating to the operation of the aircraft.
- (b) Each AOM shall be based upon the aircraft manufacturer's data for the specific aircraft type and variant operated by the AOC holder and shall include specific operating parameters, details of the aircraft systems, and checklists to be used applicable to the operations of the AOC holder that are approved by the Authority. The design of the manual shall observe human factors principles.
- (c) The AOM shall be issued to the flight crew members and persons assigned operational control functions to each aircraft operated by the AOC holder.
- (d) The AOM shall conform to the outline prescribed in IS 4.4.

4.5 Aircraft Technical Log Entries – Journey Records Section

- (a) Each AOC holder shall use an aircraft technical log containing a journey records section that includes the following information for each flight:
 - (i) Aircraft nationality and registration;
 - (ii) Date;
 - (iii) Names of crew members;
 - (iv) Duty assignments of crew members;
 - (v) Place of departure;
 - (vi) Place of arrival;
 - (vii) Time of departure;
 - (viii) Time of arrival;
 - (ix) Hours of flight;
 - (x) Nature of flight (private, aerial work, scheduled, non-scheduled);
 - (xi) Incidents, observations, if any; and
 - (xii) Signature of person in charge.
- (b) Entries in the journey records section shall be made current and in ink or indelible pencil.

- (c) Completed journey records sections shall be retained to provide a continuous record of the last 2 years of operations.

4.6 Designation of Pilot-In-Command for Commercial Air Transport

The AOC holder shall, for each commercial air transport operation, designate in writing one pilot as the PIC.

4.7 Required Cabin Crew Members

- (a) The AOC holder shall schedule the minimum number of required cabin crew members on board passenger-carrying flights.
- (b) The PIC shall ensure that the minimum number of required cabin crew members is on board the passenger-carrying flight.
- (c) The number of cabin crew members shall not be less than the minimum prescribed by the Authority in the AOC holder's operations specifications or the following, whichever is greater:
 - (i) For a seating capacity of 20 to 50 passengers: 1 cabin crew member; and
 - (ii) One additional cabin crew member for each unit, or part of a unit, of 50-passenger-seat capacity.
- (d) 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 member (or another person qualified in the emergency evacuation procedures for the aircraft).

4.8 Carriage of Special Situation Passengers

- (a) No AOC holder may allow the transport of special situation passengers except:
 - (i) As provided in the AOC holder's OM procedures; and
 - (ii) With the knowledge and concurrence of the PIC.

4.9 Crew Member Checking and Standardisation Programme

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

4.10 Reserved

4.11 Flight Deck Check Procedure

- (a) Each AOC holder shall issue to its flight crews, and shall make available on each aircraft, the checklist procedures approved by the Authority appropriate to the type and variant of aircraft.
- (b) Each AOC holder 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 system abnormalities and emergencies.
- (c) Each AOC holder shall ensure that the checklist procedures are designed so that a flight

crew member will not need to rely upon his or her memory for items to be checked.

- (d) Each AOC holder shall make the approved procedures readily usable in the flight deck of each aircraft, and the flight crew shall be required to follow the approved procedures when operating the aircraft.

4.12 Minimum Equipment List and Configuration Deviation List

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

4.13 Performance Planning Manual

- (a) Each AOC holder shall provide, for the use of flight crew members 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 the aircraft type and variant and shall contain adequate performance information to accurately calculate the performance in all normal phases of flight operation.

4.14 Performance Data Control System

- (a) Each AOC holder shall have a system approved by the Authority for obtaining, maintaining, and distributing to appropriate personnel current performance data for each aircraft, route, and aerodrome that it uses.
- (b) The system approved by the Authority shall provide current obstacle data for departure and arrival performance calculations.

4.15 Aircraft Loading and Handling Manual

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

4.16 Mass and Balance Data Control System

Each AOC holder 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.

4.17 Cabin Crew Member Manual

- (a) The AOC holder shall issue to cabin crew members, and provide to passenger agents during the performance of their duties, a Cabin Crew Member Manual acceptable to the Authority.
- (b) The Cabin Crew Member Manual shall contain those operational policies and procedures applicable to cabin crew members and the carriage of passengers.
- (c) The AOC holder shall issue to the cabin crew members a 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.

4.18 Passenger Briefing Cards

- (a) Each AOC holder shall carry on each passenger-carrying aircraft, in convenient locations for the use of each passenger, printed cards supplementing the oral briefing and containing:
 - (i) Diagrams and methods of operating the emergency exits;
 - (ii) Other instructions necessary for the use of the emergency equipment; and
 - (iii) Information regarding the restrictions and requirements associated with sitting in an exit-seat row.
- (b) Each AOC holder shall ensure that each passenger briefing card contains information that is pertinent only to the type and variant of aircraft used for that flight.
- (c) Specific information to be included on passenger briefing cards regarding exit seating is prescribed in IS 4.18.

4.19 Aeronautical Data Control System

- (a) Each AOC holder shall have a system approved by the Authority for obtaining, maintaining, and distributing to appropriate personnel current aeronautical data for each route and aerodrome that it uses.
- (b) Specific aerodrome information to be contained in the aeronautical data control system is prescribed in IS 4.19.

4.20 Route Guide – Areas, Routes, Aerodromes, and Heliports

- (a) Each AOC holder shall provide, for the use of flight crew members and persons assigned operational control functions during the performance of their duties, information on areas, routes, aerodromes, and heliports as well as aeronautical charts approved by the Authority.
- (b) The AOC holder shall keep the route guide and aeronautical charts current and appropriate for the proposed types and areas of operation to be conducted by the AOC holder. This information may be issued as part of, or separately from, the OM.
- (c) This information shall contain at least the information prescribed in IS 4.20.

4.21 Weather Reporting Sources

- (a) Each AOC holder shall use sources approved by the Authority for the weather reports and forecasts used for decisions regarding flight preparation, routing, and terminal operations.
- (b) For passenger-carrying operations, the AOC holder shall have an approved system for

obtaining forecasts and reports of adverse weather phenomena that may affect the safety of flight on each route to be flown and at each aerodrome to be used.

- (c) A list of weather reporting sources approved by the Authority for flight planning or for controlling flight movement are prescribed in IS 4.21.

4.22 De-Icing and Anti-Icing Programme

- (a) Each AOC holder planning to operate an aircraft in conditions where frost, ice, or snow may reasonably be expected to adhere to the aircraft shall:
 - (i) Use only aircraft adequately equipped for such conditions;
 - (ii) Ensure the flight crew is adequately trained for such conditions; and
 - (iii) Have an approved ground de-icing and anti-icing programme.
- (b) Detailed requirements pertaining to the AOC holder's de-icing and anti-icing programme are prescribed in IS 4.22.

4.23 Flight Dispatch and Monitoring System

- (a) Each AOC holder shall have an adequate system approved by the Authority for proper dispatch and monitoring of flights, considering the operations to be conducted.
 - (i) The AOC holder's dispatch and monitoring system shall have enough dispatch centres adequate for the operations to be conducted, located at points necessary to ensure adequate flight preparation, dispatch, and in-flight contact with flight operations.
 - (ii) Each AOC holder shall provide enough qualified FOOs at each dispatch centre to ensure proper operational control of each flight.
- (b) 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 shall continue to be primarily responsible for operational control of each flight.
 - (i) Each AOC holder conducting charter operations using a flight following system shall show that the system has adequate facilities and personnel to provide to the following persons the information necessary for the initiation and safe conduct of each flight:
 - (1) The flight crew of each aircraft; and
 - (2) The persons designated by the AOC holder to perform the function of operational control of the aircraft.
 - (ii) Each AOC holder conducting charter operations shall show that the personnel required to perform the function of operational control are able to perform their duties.

4.24 Fatigue Risk Management System

- (a) For the purpose of managing fatigue-related safety risks, an AOC holder shall establish either:
 - (i) Flight time, flight duty period, duty period, and rest period limitations that are within the prescriptive fatigue management requirements in 4.10.2(a) of SLCARs Part 6A;

- (ii) An FRMS in compliance with SLCARs Part 6A; or
- (b) Where the AOC holder adopts prescriptive fatigue management requirements for part or all of its operations, the Authority may approve, in exceptional circumstances, variations to such requirements on the basis of a risk assessment provided by the operator. Approved variations shall provide a level of safety equivalent to, or better than that achieved through the prescriptive fatigue management requirements.
- (c) The Authority will approve an operator's FRMS before it may take the place of any or all of the prescriptive fatigue management requirements. An approved FRMS shall provide a level of safety equivalent to, or better than, the prescriptive fatigue management requirements.
- (d) Operators using an FRMS shall adhere to the following provisions of the FRMS approval process, which allows the Authority to ensure that the approved FRMS meets the requirements of SLCARs Part 6A:
 - (i) Establish maximum values for flight times and/or flight duty period(s) and duty period(s) and minimum values for rest periods; these values shall be based upon scientific principles and knowledge, subject to safety assurance processes;
 - (ii) Adhere to Authority mandates to decrease maximum values and increase minimum values in the event that the operator's data indicates these values are too high or too low, respectively; and
 - (iii) Provide justification to the Authority for any increase in maximum values or decrease in minimum values based on accumulated FRMS experience and fatigue-related data before such changes will be approved by the Authority.
- e) Operators implementing an FRMS to manage fatigue-related safety risks shall, at a minimum:
 - (i) Incorporate scientific principles and knowledge within the FRMS;
 - (ii) Identify fatigue-related safety hazards and the resulting risks on an ongoing basis;
 - (iii) Ensure that remedial actions, necessary to effectively mitigate the risks associated with the hazards, are implemented promptly;
 - (iv) Provide for continuous monitoring and regular assessment of the mitigation of fatigue risks achieved by such actions; and
 - (v) Provide for continuous improvement of the overall performance of the FRMS.
- f) Detailed requirements pertaining to FRMS are prescribed in IS 4.24.

4.25 Communications Facilities

- (a) Each AOC holder'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, each AOC holder shall be able to have rapid and reliable radio communications with all flights over the AOC holder's entire route structure under normal operating conditions. This radio communication system shall be independent of the ATC system.
- (c) Each AOC holder engaged in international air navigation shall at all times have available for immediate communication to rescue coordination centres information on

the emergency and survival equipment carried on board any of its aircraft, including, as applicable:

- (i) The number, colour, and type of life rafts and pyrotechnics;
- (ii) Details of emergency water and medical supplies; and
- (iii) The type and frequencies of the emergency portable radio equipment.

4.26 Routes and Areas of Operation

- (a) An AOC holder shall conduct operations only along such routes and within such areas for which:
 - (i) Ground facilities and services, including meteorological services, are provided that are adequate for the planned operation;
 - (ii) The performance of the aircraft intended to be used is adequate to comply with minimum flight altitude requirements;
 - (iii) The equipment of the aircraft intended to be used meets the minimum requirements for the planned operation;
 - (iv) Appropriate and current maps and charts are available;
 - (v) If two-engine aircraft are used, adequate aerodromes are available within the time and distance limitations; and
 - (vi) If single-engine aircraft are used, surfaces are available that permit a safe forced landing to be executed.
- (b) No person may conduct commercial air transport operations on any route or in any area of operation unless those operations are conducted in accordance with any restrictions imposed by the Authority.

4.27 Navigational Accuracy

- (a) Each AOC holder shall ensure, for each proposed route or area, that the navigation systems and facilities it uses are capable of navigating the aircraft:
 - (i) Within the degree of accuracy required for ATC; and
 - (ii) To the aerodromes 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 authorise day VFR operations that can be conducted safely by pilotage because of the characteristics of the terrain.
- (c) Except for those navigation aids required for routes to alternate aerodromes, the Authority will list in the AOC holder'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 AOC holder shows have reliably lighted landmarks adequate for safe operation.
- (e) Operations on route segments where the use of celestial or other specialised means of navigation is required shall be approved by the Authority.

4.28 Aircraft Tracking

- (a) The AOC holder shall establish an aircraft tracking capability to track aeroplanes throughout its areas of operation.
- (b) The AOC holder shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) under the following conditions:
 - (i) The aeroplane has a maximum certificated take-off mass of over 27 000 kg and a seating capacity greater than 19; and
 - (ii) Where an ATS unit obtains aeroplane position information at greater than 15-minute intervals.
- (c) The AOC holder shall track the position of an aeroplane through automated reporting at least every 15 minutes for the portion(s) of the in-flight operation(s) planned in an oceanic area under the following conditions:
 - (i) The aeroplane has a maximum certificated take-off mass of over 45 500 kg and a seating capacity greater than 19; and
 - (ii) Where an ATS unit obtains aeroplane position information at greater than 15-minute intervals.
- (d) Notwithstanding the provisions in paragraphs 4.28(b) and (c), the Authority may, based on the results of an approved risk assessment process implemented by the AOC holder, allow for variations to automated reporting intervals. The process shall demonstrate how risks to the operation resulting from such variations may be managed and shall include at least the following:
 - (i) The capability of the AOC holder's operational control systems and processes, including those for contacting ATS units;
 - (ii) The overall capability of the aeroplane and its systems;
 - (iii) The available means to determine the position of, and to communicate with, the aeroplane;
 - (iv) The frequency and duration of gaps in automated reporting;
 - (v) Human factors consequences resulting from changes to flight crew procedures; and
 - (vi) Specific mitigation measures and contingency procedures.
- (e) The AOC holder shall establish procedures, approved by the Authority, for the retention of aircraft tracking data to assist search and rescue in determining the last known position of the aircraft.

5. AOC CONTINUING AIRWORTHINESS REQUIREMENTS

5.1 Applicability

This section provides those certification and continuing airworthiness requirements that apply to an AOC holder utilising an AMO.

5.2 Continuing Airworthiness Responsibility

- (a) Each AOC holder shall ensure the airworthiness of the aircraft and the serviceability of both operational and emergency equipment by ensuring the:

- (i) Accomplishment of pre-flight inspections;
 - (ii) 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;
 - (iii) Accomplishment of all maintenance in accordance with the operator's approved aircraft maintenance programme;
 - (iv) Analysis of the effectiveness of the operator's approved aircraft maintenance programme;
 - (v) Accomplishment of any operational directive, AD, and any other continuing airworthiness requirement made mandatory by the Authority; and
 - (vi) Accomplishment of modifications in accordance with an approved standard and, for non-mandatory modifications, the establishment of an embodiment policy.
- (b) Each AOC holder shall ensure that the certificate of airworthiness for each aircraft operated remains valid with respect to:
- (i) The requirements in paragraph 5.2(a);
 - (ii) The expiration date of the certificate; and
 - (iii) Any other maintenance condition specified in the certificate.
- (c) Each AOC holder shall ensure that the requirements specified in paragraph 5.2(a) are performed in accordance with procedures approved by or acceptable to the Authority.
- (d) Each AOC holder shall ensure that the maintenance, overhaul, modification, repair, and inspection of its aircraft and aeronautical products are performed in accordance with its MCM and/or current instructions for continuing airworthiness and applicable aviation regulations.
- (e) Each AOC holder may make an arrangement with another person or entity for the performance of any maintenance, overhaul, modification, repair, or inspection, but shall remain responsible for all work performed under such arrangement.
- (f) Each AOC holder shall have its aircraft maintained and approved for return to service by an organisation approved in accordance with SLCAR Part 8B, or by a person or organization in accordance with procedures that are authorized by the State of Registry.

5.3 Approval and Acceptance of AOC Continuing Airworthiness Systems and Programmes

- (a) An AOC holder shall not operate an aircraft, except for pre-flight inspections, unless it is maintained and approved for return to service by an organisation approved in accordance with Part 8B of these regulations, or by a person or organization in accordance with procedures that are authorized by the State of Registry.

5.4 Maintenance Control Manual

- (a) Each AOC holder shall provide to the Authority, and to the State of Registry of the aircraft if different from the Authority, the AOC holder's MCM and subsequent amendments observing human factors principles, for the use and guidance of maintenance and operational personnel concerned and containing details of the

organisation's structure, including:

- (i) The accountable manager and designated person(s) responsible for the maintenance programme, as required by 3.2.2 of this Regulation;
 - (ii) Procedures to be followed, which may be included in the AMO Procedures Manual, to satisfy the maintenance responsibility of 5.2 of this Part, except where the AOC holder is certificated as an AMO and has the quality functions of 3.2.3 of this Part;
 - (iii) Procedures for the reporting of failures, malfunctions, and defects, in accordance with 5.6 of this Part, to the Authority, the State of Registry, and the State of Design within 72 hours of discovery; in addition, items that warrant immediate notification to the Authority by telephone, facsimile, or email with a written follow-on report as soon as possible, but no later than within 72 hours of discovery, are:
 - (1) Primary structural failure;
 - (2) Control system failure;
 - (3) Fire in the aircraft;
 - (4) Engine structure failure; or
 - (5) Any other condition considered an imminent hazard to safety.
- (b) The AOC holder's MCM shall contain the following information, which may be issued in separate parts:
- (i) A description of the administrative agreements between the AOC holder and the AMO, or a description of the maintenance procedures and the procedures for completing and signing an approval for return to service when maintenance is based on a system other than that of an AMO;
 - (ii) A description of the procedures for ensuring that each aircraft they operate is in an airworthy condition;
 - (iii) A description of the procedures for ensuring that the emergency equipment for each flight is serviceable;
 - (iv) The names and duties of the person or persons required to ensure that all maintenance is carried out in accordance with the MCM;
 - (v) A reference to the maintenance programme required by 5.11 of this Part;
 - (vi) 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;
 - (vii) A description of the procedures for obtaining and assessing continuing airworthiness information from the organisation responsible for the type design and implementing any resulting actions considered necessary by the State of Registry for all aircraft over 5 700 kg maximum certificated take-off mass;
 - (viii) A description of the procedures for implementing mandatory continuing airworthiness as required in paragraph 5.2(a)(5) of this part;

- (ix) A description of the procedures for establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme in order to correct any deficiency in that programme;
 - (x) A description of the aircraft types and Sierra Leones to which the AOC holder's MCM applies;
 - (xi) Methods for completion and retention of records
 - (xii) a description of the procedures for complying with the service information reporting requirements
 - (xiii) A description of the procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified; and
 - (xiv) A description of the procedures for advising the State of Registry of significant in-service occurrences.
- (c) No AOC holder may provide for use by its personnel in commercial air transport any MCM or portion of this manual that has not been reviewed and approved for the AOC holder by the Authority.
 - (d) An outline of specific subjects to be contained, as appropriate, in the AOC holder's MCM is prescribed in IS 5.4.

5.5 Maintenance Management

- (a) The AOC holder certificated as an AMO may carry out the requirements specified in paragraphs 5.2(a)(2), (3), (5), and (6) of this part.
- (b) If the AOC holder is not certificated as an AMO, the AOC holder shall meet its responsibilities under paragraphs 5.2(a)(2), (3), (5), and (6) of this part:
 - (i) Through an arrangement with an AMO, with a written maintenance contract between the AOC holder and the contracting AMO detailing the required maintenance functions and defining the support of the quality functions approved or accepted by the Authority or by a person or organization in accordance with procedures that are authorized by the State of Registry.
- (c) Each AOC holder 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 5.2 of this Part and the requirements of the AOC holder's MCM are satisfied, and to ensure the functioning of the quality system.
- (d) Each AOC holder shall provide suitable office accommodation at appropriate locations for the personnel specified in paragraph 5.5(c).
- (e) Each AOC holder shall establish for the maintenance of aircraft an SMS that is in accordance with 3.2.10 of this Part and is acceptable to the Authority.

5.6 Reporting of Failures, Malfunction and Defects

- (a) Owners or operators of aircraft over 5,700 kg maximum take-off weight or of any aircraft used in a commercial operation shall report to the Authority any failures, malfunctions, or defects that result in at least the following—
 - (i) Fires during flight and whether the related fire-warning system properly operated;

- (ii) Fires during flight not protected by a related fire-warning system;
 - (iii) False fire warning during flight;
 - (iv) An engine exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;
 - (v) An aircraft component that causes accumulation or circulation of smoke, vapour, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;
 - (vi) Engine shutdown during flight because of flameout;
 - (vii) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;
 - (viii) Engine shutdown during flight due to foreign object ingestion or icing;
 - (ix) Shutdown during flight of more than one engine;
 - (x) A propeller feathering malfunction or inability of the system to control overspeed during flight;
 - (xi) A fuel or fuel-dumping system failure that affects fuel flow or causes hazardous leakage during flight;
 - (xii) An unintended landing gear extension or retraction, or opening or closing of landing gear doors during flight;
 - (xiii) Brake system components failure that results in loss of brake actuating force when the aircraft is in motion on the ground;
 - (xiv) Aircraft structure that requires major repair;
 - (xv) Cracks, permanent deformation, or corrosion of aircraft structure, if more than the maximum acceptable to the manufacturer or the Authority;
 - (xvi) Aircraft components or systems malfunctions that result in taking emergency actions during flight (except action to shut down an engine);
 - (xvii) Each interruption to a flight, unscheduled change of aircraft en route, or unscheduled stop or diversion from a route, caused by known or suspected technical difficulties or malfunctions;
 - (xviii) Any abnormal vibration or buffeting caused by a structural or system malfunction, defect, or failure; and
 - (xix) A failure or malfunction of more than one attitude, airspeed, or altitude instrument during a given operation of the aircraft.
- (b) Owners or operators of aircraft over 5,700 kg maximum take-off weight or of any aircraft used in a commercial operation shall report to the Authority—
- (i) The number of engines removed prematurely because of malfunction, failure or defect, listed by make and model and the aircraft type in which it was installed; and
 - (ii) The number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed.
- (c) Each report required in 5.6 shall —
- (i) be made within three (3) days after determining that the failure, malfunction, or defect required to be reported has occurred; and
 - (ii) Include as much of the following information as is available and applicable—
 - (1) Aircraft serial number;
 - (2) When the failure, malfunction, or defect is associated with an article approved under a TSO authorisation, the article serial number and model designation, as appropriate;

- (3) When the failure, malfunction or defect is associated with an engine or propeller, the engine or propeller serial number, as appropriate;
 - (4) Product model;
 - (5) Identification of the part, component, or system involved, including the part number; and
 - (6) Nature of the failure, malfunction, or defect.
- (d) The Authority, if it is the Authority of the State of Registry of the aircraft, will submit all such reports upon receipt to the State of Design.
 - (e) The Authority, if it is not the Authority of the State of Registry of the aircraft, will submit all such reports upon receipt to the State of Registry.

5.7 Maintenance Records

- (a) Each AOC holder shall ensure that a system has been established to keep, in a form acceptable to the Authority, the following records:
 - (i) The total time in service (hours, calendar time, and cycles, as appropriate) of the aircraft and all life-limited parts;
 - (ii) The current status of compliance with all mandatory continuing airworthiness information;
 - (iii) Appropriate details of modifications and repairs to the aircraft or aeronautical products;
 - (iv) The time in service (hours, calendar time, and cycles, as appropriate) since last overhaul of the aircraft or aeronautical products subject to mandatory overhaul life;
 - (v) The current aircraft status of compliance with the maintenance programme; and
 - (vi) The detailed maintenance records to show that all requirements for the signing of an approval for return to service has been met.
- (b) Each AOC holder shall ensure that the records in paragraphs 5.8(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 that the records in paragraph 5.8(a)(6) shall be kept for a minimum of 1 year after the signing the approval for return to service.
- (c) Each AOC holder shall ensure that in the event of a temporary change of operator, the records specified in paragraph 5.8(a) shall be made available to the new operator.
- (d) Each AOC holder shall ensure that when an aircraft is permanently transferred from one operator to another operator, the records specified in paragraph 5.8(a) are also transferred.

5.8 Aircraft Technical Log Entries – Maintenance Records Section

- (a) Each AOC holder shall use an aircraft technical log that includes an aircraft maintenance records section containing the following information for each aircraft:
 - (i) Information about each previous flight, necessary to ensure continuing flight safety;
 - (ii) The current aircraft maintenance release and/or an airworthiness release;
 - (iii) The current inspection status of the aircraft, to include inspections due to be performed on an established schedule and inspections due to be performed that are not on an established schedule, except that the Authority may agree to the maintenance statement being kept elsewhere;
 - (iv) The current maintenance status of the aircraft, to include maintenance due to be performed on an established schedule and maintenance due to be performed that is not on an established schedule, except that the Authority may agree to the maintenance statement being kept elsewhere; and

- (v) All deferred defects that affect the operation of the aircraft.
- (b) The aircraft technical log and any subsequent amendment shall be approved by the Authority.
- (c) Each person who takes action in the case of a reported or observed failure or malfunction of an aircraft or aeronautical product that is critical to the safety of flight shall make, or shall have made, a record of that action in the maintenance records section of the aircraft technical log.
- (d) Each AOC holder shall have a procedure for keeping copies of required records to be carried on board, in a place readily accessible to each flight crew member, and shall put that procedure in the AOC holder's OM.

5.9 Return to Service

- (a) No AOC holder shall operate an aircraft unless the aircraft has both an approval for return to service, if maintenance has been performed prior to the flight, and a valid logbook entry in the maintenance records section of the aircraft technical log, as follows:
 - (i) Approval for return to service:
 - (1) An AOC holder shall not operate an aircraft unless the aircraft is maintained and approved for return to service as follows:
 - a) the operator shall not operate an aeroplane unless it is maintained and returned to service by an organisation approved in accordance with Part 8B of these regulations, or by a person or organization in accordance with procedures that are authorized by the State of Registry.
 - b) when maintenance is not carried out by an AMO, the person signing the approval for return to service shall be licensed in accordance with SLCAR Part 1A to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and procedures acceptable to the Authority
 - (2) An AOC holder using an AMO shall not operate an aircraft after return to service under paragraph 5.10(a)(1)(i) unless an approval for return to service has been prepared in accordance with the AOC holder's MCM procedures and a logbook entry has been made in the maintenance records section of the aircraft technical log.
 - (3) An AOC holder person shall not operate an aircraft after return to service under paragraph 5.10(a)(1)(i) unless a logbook entry in the maintenance records section of the aircraft technical log is prepared or caused to be prepared by an appropriately licensed and rated person in accordance with Part 1A of these regulations, as appropriate. This approval for return to service shall be made in accordance with the AOC holder's MCM procedures.
 - (4) The AOC holder shall ensure that the PIC of the aircraft has reviewed the maintenance records section of the aircraft technical log and has determined that any maintenance performed has been appropriately documented.
 - (ii) Aircraft technical log – maintenance records section:
 - (1) An AOC holder shall not operate an aircraft unless the PIC is in possession of a valid logbook entry in the maintenance records section of the aircraft technical log to indicate that any maintenance performed on the aircraft has been satisfactorily performed and appropriately documented.

5.10 Modifications and Repairs

- (a) All modifications and repairs shall comply with airworthiness requirements acceptable to the State of Registry. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements is retained. However, in the case of a major repair or major modification, the work shall have been performed in accordance with technical data approved by the State of Design and accepted by the Authority.
- (b) An AOC holder may be authorised to perform maintenance, overhaul, modifications, repairs, and inspections on any aircraft or aeronautical product under the AOC, provided:
 - (i) It is performed under a maintenance system, acceptable to the State of Registry, that is equivalent to that of an AMO established in accordance with SLCARs Part 8B; and
 - (ii) It is performed in accordance with the approved AOC holder's operations specifications.
 - (1) An AOC holder using a maintenance system acceptable to the State of Registry or an equivalent to that of an AMO that wishes to approve for return to service, after major repairs or major modifications, an aircraft registered in Sierra Leone shall use a current and valid licensed AMT with an airframe and power plant rating and shall be qualified in accordance with SLCAR Part 1A.
- (c) Each AOC holder shall, promptly upon completion, prepare a report of each major modification or major repair of an aircraft or aeronautical product.
- (d) The AOC holder shall submit to the Authority a copy of each report of a major modification and shall keep available for inspection a copy of each report of a major repair.
- (e) The Authority issuing an approval for the design of a modification, repair, or replacement part shall do so on the basis of satisfactory evidence that the aircraft is in compliance with airworthiness requirements used for the issuance of the type certificate, its amendments, or later requirements, when determined by the State of Registry.

5.11 Aircraft Maintenance Programme

- (a) Each AOC holder's aircraft maintenance programme and any subsequent amendment shall be submitted to the State of Registry for approval.
- (b) The acceptance by the Authority of all leased aircraft maintenance program will be conditioned upon prior approval by the State of Registry or, where appropriate, upon the AOC holder's compliance with recommendations provided by the State of Registry.
- (c) The Authority of Sierra Leone will require an AOC holder to include a reliability programme when the Authority determines that such a reliability programme is necessary. When such a determination is made by the Authority, the AOC holder shall provide such procedures and information in the AOC holder's MCM.
- (d) Each AOC holder shall ensure that each of its aircraft is maintained in accordance with the AOC holder's approved maintenance programme, as required by 5.2 of this Regulation, which shall include:
 - (i) Maintenance tasks and the intervals in which these are to be performed, taking into account the anticipated utilisation of the aircraft;
 - (ii) When applicable, a continuing structural integrity programme;
 - (iii) Certification maintenance requirement;
 - (iv) Procedures for changing or deviating from paragraphs 5.12(c)(1) and (2); and
 - (v) When applicable, condition monitoring and reliability programme for aircraft systems, components, and power plants.

- (e) The design and application of the AOC holder's maintenance programme shall observe Human Factors principles.
- (f) Repetitive maintenance tasks that are specified in mandatory intervals as a condition of approval of the type design shall be identified as such.
- (g) No AOC holder may provide for use by its personnel in commercial air transport a maintenance programme or portion thereof that has not been reviewed and approved for the AOC holder by the Authority of Sierra Leone.
- (h) Approval by the Authority of an AOC holder's maintenance programme and any subsequent amendments shall be noted in the operations specifications pursuant to paragraph 2.3(c) of this Part.
- (i) Each AOC holder shall have an inspection programme and a programme covering other maintenance, overhaul, modifications, repair, and inspections to ensure that:
 - (i) Maintenance, overhaul, modifications, repairs, and inspections performed by it, or by other persons, are performed in accordance with the AOC holder's MCM;
 - (ii) Each aircraft returned to service is airworthy and has been properly maintained for operation.
- (j) The Authority may amend any specifications issued to an AOC holder to permit deviation from those provisions of this subpart that would prevent the return to service and use of aeronautical products because those items have been maintained, modified, or inspected by persons employed outside Sierra Leone who do not hold a Sierra Leone technician's licence. Each AOC holder that is granted authority under this deviation shall provide for surveillance of facilities and practices to ensure that all work performed on these products is accomplished in accordance with the AOC holder's MCM.

5.12 Reliability Programme

- (a) A maintenance programme for each aeroplane shall contain, when applicable, condition monitoring and reliability programme descriptions for aircraft systems, components, and powerplants.
- (b) A reliability programme shall be developed for the aircraft maintenance programme if the maintenance programme is based upon Maintenance Steering Group logic, includes condition-monitored components, or does not contain overhaul time periods for all significant system components.
- (c) A reliability programme need not be developed for aircraft not considered large aircraft or that contain overhaul time periods for all significant aircraft system components.
- (d) The purpose of a reliability programme is to ensure that the aircraft maintenance programme tasks are effective and that their periodicity is adequate.
- (e) A reliability programme may result in the escalation or deletion of maintenance tasks, as well as de-escalation or addition of maintenance tasks.
- (f) A reliability programme provides an appropriate means of monitoring the effectiveness of the maintenance programme.

5.13 Authority to Perform and Approve Maintenance, Overhaul, Modifications, Repairs, and Inspections

- (a) An AOC holder that is not certificated as an AMO may perform maintenance, overhaul, modifications, repairs, inspections, and approvals for return to service on any aircraft or aeronautical product, if approved by the State of Registry of the aircraft and listed in the operations specifications, as provided in its maintenance programme, and accepted by the State of the Operator.

- (b) An AOC holder may make arrangements with an appropriately rated AMO for the performance of maintenance, overhaul, modifications, repairs, and inspections of any aircraft or aeronautical product as provided in its maintenance programme and MCM. The activities listed shall be performed by an AMO approved by the State of Registry or approved by another Authority that is accepted by the State of Registry.
- (c) An AOC holder that is not certificated as an AMO shall use an appropriately licensed and rated person in accordance with SLCARs Part 1A of these regulations, as appropriate, to approve for return to service any maintenance, overhaul, modifications, repairs, and inspections of any aircraft or aeronautical product after performing or supervising in accordance with technical data approved by the State of Registry. The activities listed shall be performed by a person licensed by the State of Registry.

5.14 Licence Requirements for a Technician – AOC Holder Using Equivalent System

- (a) Each person who is directly in charge of the maintenance, overhaul, modification, or repair of any aircraft or aeronautical product and each person who performs required inspections and approves for return to service the work performed shall be an appropriately licensed and rated technician or repair specialist in accordance with SLCAR Part 1A, as appropriate, and shall be acceptable to the Authority. The activities listed shall be performed by a person licensed by the State of Registry.
- (b) A person who is directly in charge shall be on site and need not physically observe and direct each worker constantly but shall be available for consultation and decision on matters requiring instruction or decision from higher authority than that of the persons performing the work.

5.15 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 certificated 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 certificated 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 certificated for commercial air transport may be continued on duty for:
 - (i) Up to 16 consecutive hours; or
 - (ii) 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 AOC holder shall relieve the person performing maintenance functions from all duties for 24 consecutive hours during any 7-consecutive-day period.

6. AOC SECURITY MANAGEMENT

6.1 Applicability

This section provides those certification requirements that apply to the AOC holder's protection of aircraft, facilities, and personnel from unlawful interference.

6.2 Security Requirements

Each AOC holder shall ensure that all appropriate personnel are familiar with, and comply with, the relevant requirements of the national security programmes of the State of the Operator.

6.3 Security Training Programmes

- (a) Each AOC holder shall establish, maintain, and conduct approved security training programmes that enable the operator's personnel to take appropriate action to prevent acts of unlawful interference, such as sabotage, or unlawful seizure of aircraft and to minimise the consequences of such events should they occur.
- (b) Each AOC holder that is responsible for aerodrome screening of passengers, baggage, and cargo shall include screening training in its security training programme.
- (c) Each AOC holder's security training programme shall include the items as listed in SLCARs Part 6A.

6.4 Reporting Acts of Unlawful Interference

Following an act of unlawful interference on board an aircraft, the PIC, or in his or her absence, the AOC holder, shall submit without delay a report of such an act to the designated local authority and the Authority in the State of the Operator.

6.5 Aircraft Search Procedure Checklist

- (a) Each AOC holder shall ensure that all its aircraft carry a checklist of the procedures to be followed for that type of aircraft in searching for concealed weapons, explosives, or other dangerous devices.
- (b) The aircraft search procedure checklist shall be supported by guidance on the appropriate course of action to be taken should a bomb or suspicious object be found and by information on the least-risk bomb location specific to the aircraft.

6.6 Flight Crew Compartment Doors, If Installed – Security Procedures

- (a) The flight crew compartment door on a passenger-carrying aircraft shall be capable of being locked from within the compartment in order to prevent unauthorised access.
- (b) Each AOC holder shall have an approved means by which the cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin.
- (c) All passenger-carrying aeroplanes shall be equipped with an approved flight crew compartment door, where practicable, that is designed to resist penetration by small arms fire and grenade shrapnel and to resist forcible intrusion by unauthorised persons. This door shall be capable of being locked and unlocked from either pilot's station.
 - (i) 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 authorised persons; and
 - (ii) 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 behaviour or potential threat.

6.7 Flight Crew Compartment Doors, Large Aeroplanes – Security Procedures

- (a) All aeroplanes with a maximum certificated take-off mass in excess of 45 500 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 intrusions by unauthorised persons. This door shall be capable of being locked and unlocked from either pilot's station.

- (i) 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 authorised persons; and
- (ii) 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 behaviour or potential threat.

6.8 Carriage of Weapons

Where an operator accepts the carriage of weapons removed from passengers, the aeroplane shall have provision for stowing such weapons in a place so that they are not accessible to any person during flight time.

7. AOC DANGEROUS GOODS MANAGEMENT

7.1 Applicability

This subpart provides those certification requirements that apply to the management and transport of dangerous goods by air.

7.2 Approval to Transport Dangerous Goods

No AOC holder may transport dangerous goods unless given specific approval to do so by the Authority.

7.3 Scope

- (a) Each AOC holder shall comply with the provisions contained in ICAO Doc 9284, *Technical Instructions for the Safe Transport of Dangerous Goods by Air*, hereinafter referred to as "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 Sierra Leone. Where dangerous goods are to be transported outside the territory of Sierra Leone, 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 that would otherwise be classified as dangerous goods are excluded from the requirements of this subpart, to the extent specified in the Technical Instructions, provided they are:
 - (i) Required to be on board the aircraft for operating reasons;
 - (ii) Carried as catering or cabin service supplies;
 - (iii) Carried for use in flight as a veterinary aid or as a humane killer for an animal; or
 - (iv) Carried for use in flight for medical aid for a patient, provided that:
 - (1) Gas cylinders have been manufactured specifically for the purpose of containing and transporting that particular gas;
 - (2) Drugs, medicines, and other medical matter are under the control of trained personnel during the time when they are in use in the aircraft;
 - (3) Equipment containing wet cell batteries is kept and, when necessary, secured in an upright position to prevent spillage of the electrolyte; and
 - (4) 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
 - (5) They are carried by passengers or crew members.

- (c) Articles and substances intended as replacements for those described in paragraph 7.3(b)(1) shall be transported on an aircraft as specified in the Technical Instructions.

7.4 Limitations on the Transport of Dangerous Goods

- (a) Each AOC holder 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 AOC holder 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:
- (i) They are exempted by the States concerned under the provisions of the Technical Instructions; or
 - (ii) The Technical Instructions indicate that they may be transported under an approval issued by the State of Origin.

7.5 Classification

Each AOC holder shall ensure that articles and substances are classified as dangerous goods as specified in the Technical Instructions.

7.6 Packaging

- (a) Each AOC holder shall ensure that dangerous goods are packaged as specified in the Technical Instructions.
- (b) Packaging used for the transport of dangerous goods by air shall:
- (i) Be of good quality and shall be constructed and securely closed so as to prevent leakage that might be caused in normal conditions of transport, by vibration, or by changes in temperature, humidity, or pressure;
 - (ii) Be suitable for the contents. Packaging in direct contact with dangerous goods shall be resistant to any chemical or other action of such goods;
 - (iii) Meet the material and construction specifications in the Technical Instructions; and
 - (iv) Be tested in accordance with the provisions of the Technical Instructions.
- (c) Packaging for which retention of a liquid is a basic function shall be capable of withstanding, without leaking, the pressure stated in the Technical Instructions.
- (d) Inner packaging shall be so packed, secured, or cushioned as to prevent 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.
- (e) No packaging shall be reused until it has been inspected and found free from corrosion or other damage. Where a packaging is reused, all necessary measures shall be taken to prevent contamination of subsequent contents.
- (f) If, because of the nature of their former contents, uncleaned empty packaging may present a hazard, they shall be tightly closed and treated according to the hazard they constitute.
- (g) No harmful quantity of a dangerous substance shall adhere to the outside of packaging.

7.7 Labelling and Marking

- (a) Each AOC holder shall ensure that packaging, overpacks, and freight containers are labelled as specified in the Technical Instructions.
- (b) Each AOC holder shall ensure that packaging, overpacks, and freight containers are marked with:
 - (i) The proper shipping name of their contents;
 - (ii) The United Nations number, when assigned; and
 - (iii) Other such markings as may be specified in the Technical Instructions.
- (c) Each AOC holder 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 that takes place wholly or partly outside the territory of Sierra Leone, the AOC holder shall ensure that labelling and marking are in the English language in addition to any other language requirements.

7.8 Dangerous Goods Transport Document

- (a) Each AOC holder 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 that takes place wholly or partly outside the territory of Sierra Leone, the AOC holder shall ensure that the English language is used for the dangerous goods transport document in addition to any other language requirements.

7.9 Acceptance of Dangerous Goods

- (a) No AOC holder may accept dangerous goods for transport until the packaging, overpack, or freight container has been inspected in accordance with the acceptance procedures in the Technical Instructions.
- (b) Each AOC holder, or its handling agent, shall use an acceptance checklist that:
 - (i) Shall allow for all relevant details to be checked; and
 - (ii) Shall be in such a form as will allow for the recording of the results of the acceptance check by manual, mechanical, or computerised means.
- (c) Each designated postal operator shall have the procedure for controlling the introduction of dangerous goods in mail into air transport approved by the Authority where the mail is accepted.

7.10 Inspection for Damage, Leakage, or Contamination

- (a) Each AOC holder shall ensure that:
 - (i) Packaging, overpacks, and freight containers are inspected for evidence of leakage or damage immediately prior to loading on an aircraft or into a ULD, as specified in the Technical Instructions;
 - (ii) A ULD is not loaded on an aircraft unless it has been inspected as required by the Technical Instructions and has been found free from any evidence of leakage from, or damage to, the dangerous goods contained therein;
 - (iii) Leaking or damaged packaging, overpacks, or freight containers are not loaded on an aircraft;
 - (iv) Any packaging of dangerous goods that is found on an aircraft and appears to be damaged or leaking is removed, or arrangements are made for its removal by an appropriate authority or organisation;

- (v) 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
- (vi) Packaging, overpacks, and freight containers are inspected for signs of damage or leakage upon unloading from an aircraft or a ULD and, if there is evidence of damage or leakage, the area where the dangerous goods were stowed is inspected for damage or contamination.

7.11 Removal of Contamination

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

7.12 Loading Restrictions and Stowage of Dangerous Goods

- (a) Each AOC holder shall ensure that packaging and overpacks containing dangerous goods and freight containers containing radioactive materials are loaded and stowed in accordance with the Technical Instructions.
 - (i) PASSENGER CABIN AND FLIGHT DECK. Each AOC holder 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.
 - (ii) 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.
 - (iii) DANGEROUS GOODS DESIGNATED FOR CARRIAGE ONLY ON CARGO AIRCRAFT. Each AOC holder shall ensure that packaging of dangerous goods bearing the “Cargo Aircraft Only” label is carried on a cargo aircraft and are loaded as specified in the Technical Instructions and in a manner that a crew member or other authorised person can see, handle, and where size and weight permit, separate such packaging from other cargo in flight.
- (b) Packaging containing dangerous goods shall be separated when stowing, as follows:
 - (i) Those packagings containing dangerous goods that may react dangerously with other packagings shall not be stowed next to each other on an aircraft or in a position that may allow interaction between them in the event of a leakage.
 - (ii) Those packagings containing toxic and infectious substances shall be stowed on an aircraft in accordance with the Technical Instructions.
 - (iii) Those packagings containing radioactive materials shall be stowed on an aircraft so that they are separated from persons, live animals, and undeveloped film and secured in flight in accordance with the Technical Instructions.
- (c) The AOC holder 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 packagings.

7.13 Provision of Information

- (a) INFORMATION TO GROUND PERSONNEL. Each AOC holder shall ensure that:
 - (i) Information is provided to enable ground personnel 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
 - (ii) Where applicable, the information referred to in paragraph 7.13(a)(1) is also provided to the handling agent.
- (b) INFORMATION TO PASSENGERS. Each AOC holder shall ensure that information is promulgated as required by the Technical Instructions so that passengers are warned as to the types of goods that they are forbidden from transporting on board an aircraft.
- (c) INFORMATION TO SHIPPERS. Each AOC holder 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 AOC holder 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, including the actions to be taken in the event of emergencies arising involving dangerous goods.

- (e) **INFORMATION TO CREW MEMBERS.** Each AOC holder shall ensure that information is provided in the OM to enable crew members to carry out their responsibilities with 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 AOC holder shall ensure that the PIC is provided, as early as is practicable before the departure of the flight, 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 ATS 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 AOC holder that is involved in an aircraft incident or accident shall:
 - (i) As soon as possible, inform the appropriate authority of the State in which the aircraft incident or accident occurred of any dangerous goods carried; and
 - (ii) On request, provide any information required to minimise the hazards created by any dangerous goods carried.

7.14 Dangerous Goods Training Programme and Manual

- (a) Each AOC holder shall have a dangerous goods training programme approved by the Authority, whether or not the AOC holder is approved to transport dangerous goods.
- (b) Crew members, passenger-handling personnel, and security personnel employed by the AOC holder that deal with the screening of passengers and their baggage and cargo shall receive initial and recurrent training that covers, at a minimum, the areas identified in SLCAR Part 6 to a depth sufficient to ensure that an awareness is gained of the hazards associated with dangerous goods, how to identify dangerous goods, and what requirements apply to the carriage of such goods by passengers.
- (c) At a minimum, the dangerous goods training programme shall include the items as listed in SLCARs PART 18.
- (d) The AOC holder shall provide such information in the OM as will enable the flight crew to carry out its responsibilities with regard to the transport of dangerous goods and shall provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

7.15 Dangerous Goods Incident and Accident Reports

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

7.16 Shipper's Responsibilities

- (a) No person shall offer a packaging, overpack, 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:
 - (i) Properly classified, packed, marked, and labelled and in the proper condition for transport by air in accordance with the relevant regulations; and
 - (ii) Accompanied by a properly executed dangerous goods transport document.

- (b) In completing the dangerous goods transport document for the AOC holder, the shipper shall, in accordance with the Technical Instructions and any other regulations of Sierra Leone:
- (i) Declare that the dangerous goods are fully and accurately described by their proper shipping names;
 - (ii) Declare that the dangerous goods are classified, packed, marked, and labelled and in the proper condition for transport;
 - (iii) Complete the form in both the language of Sierra Leone and in English when the dangerous goods are to be carried either wholly or partly outside Sierra Leone; and
 - (iv) Sign the form.

7.17 Dangerous Goods Security Provisions

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

8. CARGO COMPARTMENT SAFETY

8.1 Transport of Items in the Cargo Compartment

- (a) The AOC holder shall establish policy and procedures for the transport of items in the cargo compartment, which include the conduct of a specific safety risk assessment. The risk assessment shall include at least the:
- (i) Hazards associated with the properties of the items to be transported;
 - (ii) Capabilities of the operator;
 - (iii) Operational considerations (e.g., area of operations, diversion time);
 - (iv) Capabilities of the aeroplane and its systems (e.g., cargo compartment fire suppression capabilities);
 - (v) Containment characteristics of ULDs;
 - (vi) Packing and packaging;
 - (vii) Safety of the supply chain for items to be transported; and
 - (viii) Quantity and distribution of dangerous goods items to be transported.

8.2 Fire Protection

- (a) The elements of the cargo compartment(s) fire protection system as approved by the State of Design or State of Registry, and a summary of the demonstrated cargo compartment fire protection certification standards, shall be provided in the AFM or other documentation supporting the operation of the aeroplane.
- (b) The AOC holder shall establish policy and procedures that address the items to be transported in the cargo compartment. These shall ensure to a reasonable certainty that in the event of a fire involving those items, it can be detected and sufficiently suppressed or contained by the elements of the aeroplane design associated with cargo compartment fire protection, until the aeroplane makes a safe landing.

IMPLEMENTING STANDARDS

IS 2.3(B) CONTENTS OF AN AOC

The AOC will be based on the following template:

AIR OPERATOR CERTIFICATE		
	<i>Sierra Leone</i> ¹	For use by SLCAA ²
	<i>Sierra Leone Civil Aviation Authority</i> ³	
AOC#: ⁴	Operator name: ⁶	Operational points of contact: ¹⁰ Contact details, at which operational management can be contacted without undue delay, are listed in _____. ¹¹
	DBA trading name: ⁷	
Expiry date: ⁵	Operator address: ⁸	
	Telephone: ⁹	
	Facsimile:	
	Email:	
This certificate certifies that _____ ¹² is authorised to perform commercial air transport operations, as defined in the attached operations specifications, in accordance with the Operations Manual and the _____. ¹³		
Date of issue: ¹⁴	Name	and
	signature: ¹⁵	
	Title:	

1. *The State of the Operator.*
2. *For use by the State of the Operator.*
3. *Identification of the Issuing Authority 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 to be valid (dd-mm-yyyy).*
6. *The operator's registered name.*
7. *The operator's trading name, if different from its registered name. Insert "DBA" before the trading name (for "doing business as").*
8. *The operator's principal place of business address.*
9. *The operator's principal place of business telephone and facsimile details, including the country code. Provide the operator's email, if available.*
10. *The contact details. Include the telephone and facsimile numbers, including the country code, and the email 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.*

11. The controlled document, carried on board, in which the contact details are listed, with the appropriate paragraph or page reference (e.g., "Contact details are listed in the OM. Gen/Basic, Chapter 1, 1.1" or "... are listed in the operations specifications, page 1" or "... are listed in an attachment to this document").
12. The operator's registered name.
13. References to the appropriate regulations.
14. The issuance date of the AOC (dd-mm-yyyy).
15. The name, signature, and title of the Authority representative. In addition, an official stamp may be applied on the AOC (identification of the Issuing Authority of the State of the Operator).

IS 2.3(C) CONTENTS OF OPERATIONS SPECIFICATIONS

a) The operations specifications layout will be as follows:

OPERATIONS SPECIFICATIONS				
<i>(subject to the approved conditions in the Operations Manual)</i>				
Issuing Authority Contact Details¹				
Telephone:	Facsimile:	Email:		
_____	_____	_____		
AOC #: ²	Operator name: ³	Date: ⁴	Signature:	
_____	_____	_____	_____	
DBA trading name:				

Aircraft Sierra Leone: ⁵				

Types of operation: <input type="checkbox"/> Passengers <input type="checkbox"/> Cargo <input type="checkbox"/> Other: ⁶				
Area(s) of operation: ⁷				

Special limitations: ⁸				

Specific Approval:	Yes	No	Description ⁹	Remarks
Dangerous goods	<input type="checkbox"/>	<input type="checkbox"/>		
Low-visibility operations				
Approach and landing	<input type="checkbox"/>	<input type="checkbox"/>	CAT: ¹⁰ ____, RVR: ____m, DH: ____ ft	
Take-off	<input type="checkbox"/>	<input type="checkbox"/>	RVR: ¹¹ ____m	
Operational credit(s)	<input type="checkbox"/>	<input type="checkbox"/>	¹²	
RVSM ¹³ <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>		
EDTO ¹⁴ <input type="checkbox"/> N/A	<input type="checkbox"/>	<input type="checkbox"/>	Threshold time: ¹⁵ ____ minutes Maximum diversion time: ¹⁵ ____ minutes	
AR navigation specifications for PBN operations	<input type="checkbox"/>	<input type="checkbox"/>	¹⁶	
Continuing airworthiness	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	¹⁷	
EFB	<input type="checkbox"/>	<input type="checkbox"/>	¹⁸	
Other ¹⁹	<input type="checkbox"/>	<input type="checkbox"/>		

1. *The telephone contact details of the Authority, including the country code. Provide the Authority's email and fax if available.*
2. *The associated AOC number.*
3. *The operator's registered name and the operator trading name, if different. Insert "DBA" before the trading name (for "doing business as").*
4. *The issuance date of the operations specifications (dd-mm-yyyy) and the signature of the Authority representative.*
5. *The CAST/ICAO designation of the aircraft make, Sierra Leone, 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. *Specify other type of transportation (e.g., emergency medical service).*
7. *List the geographical area(s) of authorised operation (by geographical coordinates or specific routes, flight information region, or national or regional boundaries) as defined by the Issuing Authority.*
8. *List the applicable special limitations (e.g., VFR only, day only, etc.).*
9. *List the most permissive criteria for each specific approval (with appropriate criteria).*
10. *The applicable instrument approach operation classified as Type B (CAT II or III). Insert the minimum RVR in metres and DH in feet. Use one line per listed approach category.*
11. *The approved minimum take-off RVR in metres, or the equivalent horizontal visibility if RVR is not used. 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 credits(s) granted.*
13. *Check the not applicable (N/A) box only if the aircraft maximum ceiling is below FL 290.*
14. *List the EDTO specific approvals, if applicable. If EDTO does not apply, select "N/A." If EDTO approval does not apply based on the provisions in ICAO Annex 6, Part I: 4.7, select "N/A." Otherwise, a threshold time and maximum diversion time must be specified.*
15. *The threshold time and maximum diversion time may also be listed in distance (NM). Details of each particular aeroplane-engine combination for which the threshold time is established and maximum diversion time has been granted may be listed under 'remarks.' One line per approval may be used if different approvals are granted.*
16. *PBN: Use one line for each PBN AR navigation specification approval (e.g., RNP, AR, APCH), with appropriate limitations listed in the "Description" column.*
17. *The name of the person/organisation responsible for ensuring that the continuing airworthiness of the aircraft is maintained and the regulations that require the work, within the AOC regulation or a specific approval (e.g., EC2042/2003, Part M, Subpart G).*
18. *List the EFB functions used for the safe operation of aeroplanes and any applicable limitations.*
19. *Enter other authorisations or data, using one line (or one multi-line block) per authorisation (e.g., special approach authorisation, approved navigation performance).*

IS 3.2.2 MANAGEMENT PERSONNEL REQUIRED FOR COMMERCIAL AIR TRANSPORT OPERATIONS

- a) Each AOC holder shall make arrangements to ensure continuity of supervision if operations are conducted in the absence of any required management personnel.
- b) Required management personnel shall be contracted to work sufficient hours, such that the management functions are fulfilled.
- c) 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 an exemption is issued by the Authority.
- d) The minimum initial qualifications for a Director of Operations are:
 - 1) An ATPL; 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.
- e) The minimum qualifications for a chief pilot are:
 - 1) An ATPL 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) In large aircraft, if the AOC holder operates large aircraft; or
 - ii) In either large or small aircraft, if the AOC holder operates only small aircraft.
- f) The minimum qualifications for a Director of Maintenance are:
 - 1) An AMT licence with airframe and powerplant ratings;
 - 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; and
 - 3) 1 year of supervisory experience maintaining the same category and class of aircraft used by the AOC holder.
- g) The minimum qualifications for a chief inspector are:
 - 1) An AMT licence with airframe and powerplant ratings; and
 - 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.
- h) An AOC holder may employ a person who does not meet the appropriate airman qualifications or experience if the Authority issues an exemption finding that that person has comparable experience and can effectively perform the required management functions.

IS 3.2.3 QUALITY SYSTEM

- a) In order to show compliance with 3.2.3 of this part, an AOC holder shall establish its quality system in accordance with the instruction and information contained in the following paragraphs.

1.0 General

1.1 Terminology.

1.1.1 The terms used in the context of the requirement for an operator's quality system have the following meaning:

- (a) **Accountable manager.** The person acceptable to the Authority, who has corporate authority for ensuring that all operational and maintenance functions can be financed and performed to the standard required by the Authority and any additional requirements defined by the operator.
- (b) **Quality assurance.** As distinguished from quality control, involves activities in the business, systems, and technical audit areas. A set of predetermined, systematic actions that are required to provide adequate confidence that a product or service satisfies quality requirements.

1.2 Purpose of the Quality System.

1.2.1 The quality system shall enable an operator to monitor compliance with these regulations, the operator's manual system, and any other standards specified by the operator, or the Authority, to ensure safe operations and airworthy aircraft and aeronautical products.

1.3 Organisational Structure.

1.3.1 The operator may specify the basic structure of the quality system according to the size and complexity of the operation to be monitored.

1.3.2 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 (10 tonnes) maximum certificated take-off mass). Such terminology is not relevant when considering the scale of an operation and the quality system required. In the context of quality systems, therefore, operators shall be categorised according to the number of full-time personnel.

1.3.3 An operator shall be categorised according to the number of full-time personnel. Operators that employ 5 or fewer full-time employees are considered to be "very small" operations, while those employing between 6 and 20 full-time employees are regarded as "small" operations, as far as quality systems are concerned. Full time in this context means employed for not less than 35 hours per week, excluding vacation periods.

1.3.4 Complex quality systems may be inappropriate for a small or very small operation, and the clerical effort required to develop manuals and quality procedures for a complex system may stretch that operator's resources. It is therefore accepted that such an operator may tailor its quality system to suit the size and complexity of the operation and allocate resources

accordingly.

1.3.5 For small and very small operators, it may be appropriate to develop a quality assurance programme that employs a checklist. The checklist shall 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.

1.3.6 A 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/or qualified organisations to perform the quality audits on behalf of the quality manager.

1.4 Scope.

1.4.1 As a minimum, the quality system shall address the following:

- (a) Relevant terminology;
- (b) The applicable requirements of these regulations;
- (c) Any additional standards and practices of the operator;
- (d) A description of the operator, including the operational structure;
- (e) Identification of those persons responsible for the development, establishment, and management of the quality assurance programme, including a description of their duties and responsibilities;
- (f) Relevant portions of manuals, reports, and records, including a distribution list of all controlled copies;
- (g) The operator's quality policy;
- (h) Quality procedures;
- (i) A quality assurance programme, including:
 - (1) The schedule of the monitoring process;
 - (2) Audit procedures;
 - (3) Reporting procedures;
 - (4) Follow-up and corrective action procedures; and
 - (5) A recording system.
- (j) The required financial, material, and human resources; and
- (k) Training requirements.

1.5 Safety Attributes.

1.5.1 Where appropriate, an operator shall incorporate the following safety attributes into its policies, procedures, and processes:

- (a) Authority;
- (b) Responsibility;
- (c) Procedures;
- (d) Controls;

- (e) Process measurements; and
- (f) Interfaces.

1.6 Relevant Documentation.

1.6.1 The required quality system may be documented in the OM or in a separate Quality Manual. In either instance, the documentation shall:

- (a) Contain instructions and information to allow the personnel concerned to perform their duties with a high degree of safety;
- (b) Be easy to revise;
- (c) Allow personnel to determine the current revision status;
- (d) Have the date of the last revision on each page;
- (e) Not be contrary to any applicable regulation or the operator's operations specifications; and
- (f) Reference applicable regulations.

1.6.2 Each document defined within the structure of an operator's quality system shall be subject to document control. Document control procedures shall ensure that the documents are:

- (a) Authorised;
- (b) Adequate;
- (c) Security classified;
- (d) Standardised when completed;
- (e) Revised and amended when required;
- (f) Appropriately distributed;
- (g) Appropriately stored;
- (h) Periodically reviewed; and
- (i) Appropriately disposed of.

1.7 Quality Policy.

1.7.1 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.

1.7.2 The quality policy shall reflect initial and continued compliance with these regulations, the operator's manual system, and any additional requirements defined by the operator or the Authority.

1.7.3 The quality policy shall clearly define the operator's purpose, structure, principal and objectives, and all the services rendered by the operator.

1.8 Quality Management.

1.8.1 With regard to the text in paragraph 3.2.2(a) of this part, the term "accountable manager" is intended to mean the chief executive/president/managing director/general manager, etc., of the operator's organisation who, by virtue of his or her position, has overall responsibility (including financial) for managing the organisation.

1.8.2 The accountable manager shall 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 2.11 of this IS.

1.8.3 The function of the quality manager is to monitor compliance with, and the adequacy of, procedures required to ensure safe practices and airworthy aircraft and aeronautical products as required by these regulations.

1.8.4 The quality manager shall be responsible for ensuring that the quality assurance programme is properly established, implemented, and maintained.

1.8.5 The quality manager shall:

- (a) Report to the accountable manager;
- (b) Not be one of the required management personnel; and
- (c) Have access to all parts of the operation and, as necessary, to any contractor's or subcontractor's operation.

1.8.6 In the case of a very small or small operator, as defined in 1.3.3 of this IS, the positions of the accountable manager and quality manager may be combined.

1.9 Feedback System.

1.9.1 The quality system shall include a feedback system to the accountable manager to ensure that corrective action is identified and promptly addressed.

1.9.2 The feedback system shall 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.

2.0 Quality Assurance Programme

2.1 Introduction.

2.1.1 The quality assurance programme shall include all planned and systematic actions necessary to provide confidence that operational and maintenance functions are conducted in accordance with all applicable requirements, standards, and procedures.

2.2 Quality Assurance Programme Plan.

2.2.1 An operator shall describe its quality assurance duties, responsibilities, and procedures in a programme plan.

2.2.2 Terms and elements defined in the plan shall be consistent with those outlined in the operator's manual system.

2.2.3 Copies of the programme plan shall be distributed to all personnel concerned.

2.2.4 Revisions shall be made as necessary to ensure the plan continues to reflect the operator's current quality assurance duties, responsibilities, and procedures.

2.3 Monitoring.

2.3.1 The purpose of monitoring within the quality system is primarily to investigate and judge the effectiveness of the quality system and thereby to ensure that defined policy and operational and maintenance standards are continuously complied with.

2.3.2 Monitoring activity is based upon:

- (a) Quality inspections;
- (b) Quality audits;
- (c) Corrective action; and
- (d) Follow-up.

2.3.3 The operator shall establish and publish a quality procedure to monitor regulatory compliance on a continuing basis. This monitoring activity shall be aimed at eliminating the causes of unsatisfactory performance.

2.3.4 Any non-compliance identified as a result of monitoring shall be communicated to the manager responsible for taking corrective action or, if appropriate, to the accountable manager. Such non-compliance shall be recorded, for the purpose of further investigation, in order to determine the cause and to enable the recommendation of appropriate corrective action.

2.4 Quality Inspection.

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

2.4.2 Typical subject areas for quality inspections are:

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

2.4.3 Typical methods used for quality inspections for maintenance include:

- (a) Product sampling – the monitoring of a representative sample of aeronautical products 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 aeronautical products are brought in for maintenance; and

- (e) Sample reports of unairworthy conditions and maintenance errors on aircraft and components.

2.5 Quality Audit.

2.5.1 A quality audit is a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

2.5.2 Audits shall include at least the following quality assurance 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.

2.5.3 Techniques that contribute to an effective audit are:

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

2.6 Auditors.

2.6.1 An operator may decide, depending upon the complexity of the operation, whether to make use of a dedicated audit team or a single auditor. In any event, the auditor or audit team shall have relevant operations and/or maintenance experience.

2.6.2 The responsibilities of the auditors shall be clearly defined in the relevant documentation.

2.7 Auditor's Independence.

2.7.1 Auditors shall not have any day-to-day involvement in the area of the 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 operation or from external sources under the terms of an agreement acceptable to the Authority. In all cases, the operator shall 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.

2.7.2 The operator's quality assurance programme shall identify the persons within the operation 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; and
- (e) Report directly to the quality manager.

2.8 Audit Scope.

2.8.1 An operator shall monitor compliance with the operational and maintenance procedures it has designed to ensure safe operations, airworthy aircraft and aeronautical products, and the serviceability of both operational and safety equipment. In doing so it shall, as a minimum and where appropriate, monitor:

- (a) Plans and company objectives;
- (b) Operational and maintenance procedures;
- (c) Flight safety
- (d) Operator's certification, including operations specifications;
- (e) Supervision;
- (f) Aircraft performance;
- (g) All-weather operations;
- (h) Mass, balance, and aircraft loading;
- (i) Instruments and safety equipment;
- (j) Manuals, logs, and records;
- (k) Flight and duty time limitations, rest requirements, and scheduling;
- (l) Aircraft maintenance – operations interface;
- (m) Use of the MEL;
- (n) Maintenance programmes and continuing airworthiness;
- (o) AD management;
- (p) Maintenance accomplishment;
- (q) Defect deferral;
- (r) Dangerous goods;
- (s) Security; and
- (t) Training.

2.8.2 Whatever arrangements are made, an operator shall retain the ultimate responsibility for the quality system and for the completion and follow-up of corrective action.

2.9 Audit Scheduling.

2.9.1 A quality assurance programme shall include a defined audit schedule and a periodic review cycle area by area.

2.9.2 An operator shall establish a schedule of audits to be completed during a specified calendar period. All aspects of the operation shall be reviewed within every 12-month period in accordance with the quality assurance programme unless an extension to the audit period is accepted as explained below. An operator may increase the frequency of audits at its discretion but shall not decrease the frequency without the agreement of the Authority. Audit frequency shall not be decreased beyond a 24-month-period interval.

2.9.3 When an operator defines the audit schedule, significant changes to the management, operation, technologies, or these regulations shall be considered.

2.9.4 The schedule shall be flexible and shall allow unscheduled audits when trends are identified.

2.9.5 If the independent quality audit function is being conducted by external auditors, the audit schedule shall be shown in the relevant documentation.

2.10 Corrective Action and Follow-Up.

2.10.1 Corrective Action Plans

(a) The quality assurance programme shall include procedures to ensure that corrective action plans are developed in response to findings. These procedures shall monitor corrective actions to verify their effectiveness and ensure their completion. Operational responsibility and accountability for the implementation of corrective action shall reside with the department cited in the report identifying the finding. The accountable manager shall have the ultimate responsibility for resourcing the corrective action and ensuring, through the quality manager, that the corrective action has re-established compliance with the requirements of the Authority and any additional requirements defined by the operator.

(b) Subsequent to the quality inspection/audit, the individuals responsible for managing a quality assurance programme shall facilitate the corrective action process by establishing:

- (1) The identification and seriousness of any findings or concerns and any need for immediate corrective action;
- (2) The analysis of objective evidence to determine the root cause(s) of the finding or concern;
- (3) The identification of planned corrective steps that will ensure that the apparent violation or concern does not recur;
- (4) An implementation schedule, including a time frame for putting corrective steps in place; and
- (5) The individuals or departments responsible for implementing the corrective action.

2.10.2 Follow-Up.

- (a) Follow-up audits shall be scheduled when necessary to verify that corrective action has been performed and that it has been effective.
- (b) The quality manager shall:
 - (1) Ensure that corrective action plans are developed in response to findings of non-compliance;
 - (2) Verify that corrective action plans include the elements outlined in paragraph 2.10.1 of this IS;
 - (3) Monitor the implementation and completion of corrective action plans;
 - (4) Provide management with an independent assessment of corrective action plan development, implementation, and completion; and
 - (5) Initiate scheduled and/or unannounced follow-up evaluations to ensure the effectiveness of corrective steps specified in corrective action plans.

2.11 Management Evaluation.

2.11.1 A management evaluation is a comprehensive, systematic, documented review by management of the quality system and the operator's policies and procedures. The management evaluation shall consider:

- (a) The results of quality inspections, audits, and any other indicators; and
- (b) The overall effectiveness of the management organisation in achieving stated objectives.

2.11.2 A management evaluation shall identify and correct trends and shall prevent, where possible, future nonconformities. Conclusions and recommendations made as a result of an evaluation shall be submitted in writing to the responsible manager for action. The responsible manager shall be a person who has the authority to resolve deficiencies or discrepancies and take action.

2.11.3 The accountable manager shall decide upon the frequency, format, and structure of internal management evaluation activities.

2.12 Recording.

2.12.1 The operator shall maintain accurate, complete, and readily accessible records documenting the results of its quality assurance programme. Records are essential data that enable an operation to analyse and determine the root causes of non-compliance so that areas of non-compliance can be identified and addressed.

2.12.2 The following records shall be retained for a period of 5 years:

- (a) Audit schedules;
- (b) Quality inspection and audit reports;
- (c) Special evaluation reports, including trends or other reasons associated with scheduling a special evaluation;

- (d) Responses to findings or concerns contained in the reports;
- (e) Corrective action plans and reports submitted in response to findings;
- (f) Follow-up and closure reports; and
- (g) Management evaluation reports.

2.12.3 An operator shall maintain and secure the records on its premises.

2.12.4 All records shall be made available to the Authority for review.

2.12.5 Proprietary information shall be protected in accordance with applicable laws and regulations.

3.0 Quality Assurance Responsibility for Contractors

3.1 Contractors.

3.1.1 An operator may decide to contract certain functions to external organisations for the provision of services related to areas such as:

- (a) Ground de-icing/anti-icing;
- (b) Ground handling;
- (c) Maintenance;
- (d) Flight support (including performance calculations, flight planning, navigation database, and dispatch);
- (e) Training; and
- (f) Manual preparation.

3.1.2 The ultimate responsibility for the product or service provided by the subcontractor shall remain with the operator. A written agreement shall exist between the operator and the contractor clearly defining the safety-related services and quality to be provided. The contractor's safety-related activities relevant to the agreement shall be included in the operator's quality assurance programme.

3.1.3 The operator shall ensure that the subcontractor has the necessary authorisation or approval when required and the resources and competent personnel to undertake the task.

4.0 Quality-Related Briefings and Training

4.1 General.

4.1.1 An operator shall establish effective, well-planned, well-resourced, quality-related briefings for all personnel.

4.1.2 Those responsible for managing the quality system shall 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 functions in the operation.

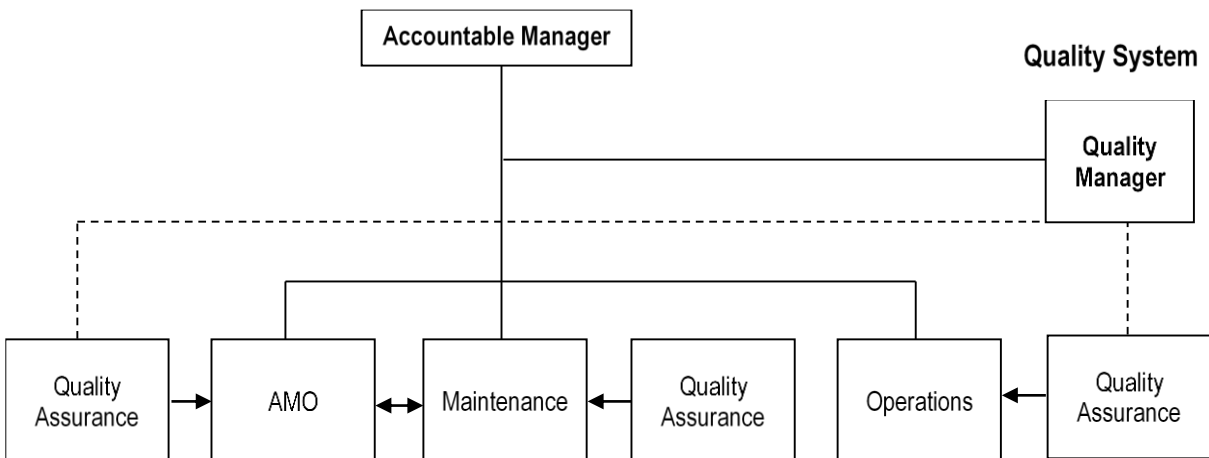
4.1.3 Time shall be provided to train every person involved in quality management and to brief those not responsible for managing the quality system. The allocation of time and resources may be governed by the size and complexity of the operation.

4.2 Sources of Training.

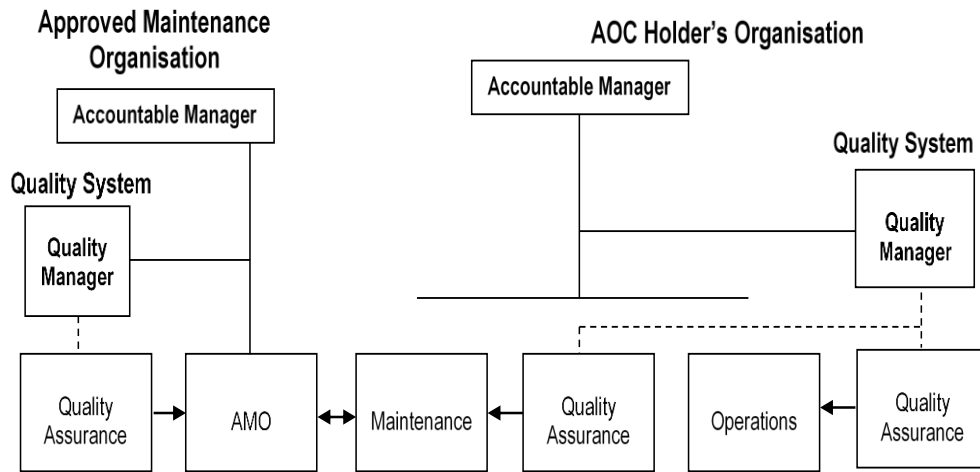
4.2.1 Quality management courses are available from the various National or International Standards Institutions, and an operator may consider whether to offer such courses to those likely to be involved in the management of quality systems. An operator with sufficient and appropriately qualified personnel may consider conducting in-house training.

(f) The following diagrams illustrate two typical examples of operator quality organisations.

(1) A quality system within the AOC holder’s organisation when the AOC holder is also an AMO certificated under Part 8B of these regulations.



(2) Quality systems related to an AOC holder’s organisation where aircraft maintenance is contracted out to an AMO that is not integrated with the AOC holder.



IS 3.2.5 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	
Flight Crew Records	Retention Period
Flight, duty, and rest time	2 years
Licence 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 goods 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
Cabin Crew Records	
Flight, duty, and rest time	2 years
Licence, 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 goods 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
Other AOC Holder Personnel Records	
Training/qualification of other personnel for whom an approved training programme is required in these regulations	Until 12 months after the employee has left the employ of the operator
Licence, 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
Flight Preparation Forms	
Completed load manifest	3 months after completion of the flight

Mass and balance reports	3 months after completion of the flight
Dispatch releases	3 months after completion of the flight
Flight plans	3 months after completion of the flight
Passenger manifests	3 months after completion of the flight
Weather reports	3 months after completion of the flight
Flight Recorder Records	
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
Aircraft Technical Log	
Journey records section	2 years
Maintenance records section	2 years
Aircraft Maintenance Records	
Total time in service (hours, calendar time, and cycles, as appropriate) of the aircraft and all life-limited parts	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 aeronautical products	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 aeronautical products 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
Other Records	
Operational flight plan	3 months after completion of the flight
Quality system records	5 years
Dangerous goods transport document	6 months after completion of the flight
Dangerous goods acceptance checklist	6 months after completion of the flight
Records on cosmic and solar radiation dosage, if the AOC holder operates aircraft that fly above 15 000 m	Until 12 months after the crew member has left the employ of the AOC holder

(49 000 ft)	
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IS 3.2.8 AIRCRAFT TECHNICAL LOG

(a) The following are two examples of an aircraft technical log:

Name of the operator: ¹	Flight log: ²	Name of PIC:	Registration:	Sheet no.: ³
Address of the operator:	PIC's signature: ⁴	Name and duty of other crew member(s):	Aircraft type:	Date:

FLIGHT ⁵				CHECK	BLOCK TIME			AIRBORNE TIME			LOAD		FUEL ON BOARD ⁶		
Nature of Flight ⁷	From	To	No. of Landings ⁸	Flight Pre-p. ⁹	Off	On	Time	Take-Off	Ldg.	Time	No. of Pax/Car go (kg/lbs)	Take-Off Mass (kg/lbs)	Uplift	Take-Off ⁹ (ltrs/kg/lbs)	Ldg:

FLIGHT DATA BLOCK TIME REPORT			INCIDENTS/OCCURRENCES/OBSERVATIONS REPORT/DEFECTS NOTED ¹⁰		
Block Time	Landings		State type of report: Operation/Technical/Other ¹¹ Also note any de-/anti-icing as instructed ¹²		
Total per day					
Total previous report					
Total to report					
FLIGHT DATA FLIGHT TIME REPORT			RETURN TO SERVICE		ACTIONS TAKEN ¹³
Flight Time	Next Maintenance Due		Name of certifying staff and applicable regulations		
Total this sheet	Hours		Certifies that the work specified, except as otherwise specified, was carried out in accordance with applicable regulations and that, with respect to that work, the aircraft/aeronautical product is considered		

			ready for return to service.	
Total from previous sheet		Landings	Signature	
Total to report		Date		

1. *The operator's name and address shall be preprinted or printed by hand.*
2. *The flight log shall be filled for:*
 - *Each day*
 - *Each flight crew.*
3. *The sheet number (e.g., yy-nn) shall be preprinted or printed by hand. All sheets shall be identifiable and numbered according to a continuous system that offers the same security when hand printed as when preprinted.*
4. *The PIC's signature states that everything on this sheet is correct.*
5. *For flights from A to A, a summary entry may be made. For all other flights, such as from A to B, an entry shall be made for each flight.*
6. *Total fuel on board (state the units unless preprinted).*
7. *The nature of the flight, such as private, commercial, technical, training, sailplane towing, etc., shall be entered.*
8. *Number of landings, if summary entry.*
9. *Flight preparation according to the OM (PIC's initials) shall state that:*
Mass and balance are within limit.
Pre-flight check is completed.
Technical status is checked and aeroplane is accepted by the PIC.
Passenger manifest/documentation is performed.
10. *Incidents/Occurrences/Observations Report/Defects Noted (Operation, Technical, Others):*
If no report needs to be made, state "-NIL-."
If a report must be made, state the type of report.
11. *Each observation shall be numbered sequentially for each log sheet.*
12. *If de-icing or anti-icing has been applied, state the time and the amount and type of fluid applied or other action taken (e.g., mechanical removal of snow or ice); if oil has been filled, state the time and amount.*
13. *Use the same number as the corresponding observation to link the report and response.*

Address of Operator:	Date:	CREW Name of Commander: Name and duty of crew member	LOAD No. of Pax: Mass (kg/lbs) Cargo: Take-off:	OIL Refilled: Total:	GROUND DEICING Type of fluid: Mixture: Time of Deicing Commenced: Finished:	Sheet Number 00000001	
	Aeroplane Type: Registration:						
FLIGHT		PRE-FLIGHT		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: Ldg:	
Defects				Signature		Actions Taken	
00000001-1						Agreement number: Date: Place: Time: Name: Signature:	
00000001-2						Agreement number: Date: Place: Time: Name: Signature:	
00000001-3						Agreement number: Date: Place: Time: Name: Signature:	
Item MEL	MEL DEFERRED DEFECT Open Date	Category	Limit Date	Captain's Acceptance		Agreement number: Date: Place: Time: Name: Signature:	

IS 3.2.11 FLIGHT SAFETY DOCUMENTS SYSTEM

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

1.0 Organisation

- 1.1** A flight safety documents system shall be organised according to criteria that ensure easy access to information required for flight and ground operations contained in the various operational documents composing the system and that 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:
- 1.2.1** Time-critical information (i.e., information that can jeopardise the safety of the operation if not immediately available);
 - 1.2.2** Time-sensitive information (i.e., information that can affect the level of safety or delay the operation if not available in a short time period);
 - 1.2.3** Frequently used information;
 - 1.2.4** Reference information (i.e., information that is required for the operation but does not fall under 1.2.2 and 1.2.3 of this IS); and
 - 1.2.5** 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 that can occur among all groups 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, abbreviations, and their standard definitions, updated on a regular basis to ensure access to the most recent terminology. All significant terms and abbreviations included in the flight documents system shall be defined.
- 3.3** A flight safety documents system shall ensure standardisation across document types, including writing style, terminology, use of graphics and symbols, and formatting. This includes a consistent location for specific types of information and the consistent use of units of measurement and 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.

- 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 that 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 the State of the Operator, the State of Design, the State of Registry, manufacturers, and equipment vendors.

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

5.2.1 Changes resulting from the installation of new equipment;

5.2.2 Changes in response to operating experience;

5.2.3 Changes in an operator's policies and procedures;

5.2.4 Changes in an operator's certificate; and

5.2.5 Changes for purposes of maintaining cross-fleet standardisation.

- 5.3** A flight safety documents system shall be reviewed:

5.3.1 On a regular basis at least once a year;

5.3.2 After major events (e.g., mergers, acquisitions, rapid growth, downsizing);

5.3.3 After technological changes (e.g., introduction of new equipment); and

5.3.4 After changes in safety regulations.

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

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

- 5.6** The method for 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 3.3.2 DRY LEASING OF FOREIGN-REGISTERED AIRCRAFT

- a) An AOC holder may dry lease an aircraft for the purpose of commercial air transportation from any AOC holder of a State that is signatory to the Chicago Convention, provided that the following conditions are met:
 - 1) The aircraft carries an appropriate certificate of airworthiness issued by the State of Registry in accordance with ICAO Annex 8 and meets the registration and identification requirements of that State of Registry;
 - 2) The aircraft is of a type design that complies with all of the requirements that would be applicable to that aircraft were it registered in Sierra Leone , including the requirements that shall be met for issuance of a Sierra Leone standard certificate of airworthiness (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 programme; and
 - 4) The aircraft is operated by Sierra Leone -licensed airmen, with additional licence authorisation by the State of Registry, employed by the AOC holder.
- b) Each AOC holder 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 AOC holder operating that aircraft.
- d) The Authority will list the dry leased aircraft on the lessor AOC holder's operations specifications.
- e) An AOC holder engaged in dry leasing aircraft shall make the dry lease agreement explicit concerning the maintenance programme and MEL to be followed during the term of the dry lease.

IS 3.3.3 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 FOOs meet the 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 FOOs meet appropriate route and aerodrome 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 programmes to ensure that any potentially hazardous dissimilarities are safely overcome by flight crew familiarisation.
- 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 its 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 3.3.4 WET LEASING AND DAMP LEASING

(a) WET LEASING

- (i) Each AOC holder shall provide the Authority with a copy of the wet lease to be executed.
- (ii) 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:
 - (1) Initiating and terminating flights;
 - (2) Maintenance and servicing of aircraft;
 - (3) Scheduling crew members;
 - (4) Paying crew members; and
 - (5) Training crew members.
- (iii) Each AOC holder engaged in a wet leasing arrangement shall amend its operations specifications to contain the following information:
 - (1) The names of the parties to the agreement and the duration of the agreement;
 - (2) The make, model and series of each aircraft involved in the agreement;
 - (3) The type of operation;
 - (4) The expiration date of the lease agreement;
 - (5) A statement specifying the party deemed to have operational control; and
 - (6) Any other item, condition, or limitation the Authority determines necessary.

(b) DAMP LEASING

- (i) A damp lease involves a wet lease aircraft as described in IS: 3.3.4(a) where the aircraft shall be operated on the lessor's AOC with flight crew. However, all or part cabin crew shall be provided by lessee.
- (ii) Under these arrangements, the responsibility for the airworthiness of the aircraft, the performance of maintenance, and signing of maintenance release shall remain with the lessor unless otherwise specified in the agreement. The airworthiness requirements for approval shall remain identical to that of a wet lease as stated in IS: 3.3.4(a).

IS 3.3.5 EMERGENCY EVACUATION DEMONSTRATION

- a) Each AOC holder shall conduct a partial emergency evacuation and ditching evacuation demonstration, observed by the Authority that demonstrates the effectiveness of the AOC holder's 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 crew members used in the emergency evacuation demonstration shall:
 - 1) Be selected at random by the Authority;
 - 2) Have completed the AOC holder's approved training programme for the type and Sierra Leone of aircraft; and
 - 3) Have passed the drills and competence check on the emergency equipment and procedures.

- d) To conduct the partial emergency evacuation demonstration, the AOC holder's assigned cabin crew members shall, using the AOC holder's line operating procedures:
 - 1) Demonstrate the opening of 50 per cent of the required floor-level emergency exits and 50 per cent of the required non-floor-level emergency exits (the opening of which by a cabin crew member is defined as an emergency evacuation duty) and deployment of 50 per cent 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 crew members 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 shall be properly inflated); and
 - 4) Enter the raft, which shall include all required emergency equipment, and shall completely set it up for extended occupancy.

IS 3.3.6 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 type of operation the AOC holder intends to conduct.
- b) Each AOC holder shall conduct demonstration flights for at least the following:
 - 1) Initial aeroplane proving tests of newly manufactured aircraft or aircraft not yet demonstrated for use in a type of operation under this part:
 - i) A minimum of 100 hours shall be flown, in addition to the aeroplane certification tests, including a representative number of flights into en route aerodromes.
 - ii) The Authority may reduce the requirement of at least 100 hours of proving tests if the Authority determines that a satisfactory level of proficiency has been demonstrated to justify the reduction. This requirement applies to either new aircraft manufactured in Sierra Leone or to any foreign-manufactured aircraft that a Sierra Leone certificate holder has not previously operated.
 - iii) Ten (10) hours shall be flown at night and may not be reduced.
 - 2) Type of aircraft and type of operations:
 - i) For each type of aircraft, at least 50 hours of demonstration flights acceptable to the Authority shall be flown for each type of operation the AOC holder intends to conduct, including a representative number of flights into en route aerodromes.
- c) Materially altered aircraft:
 - i) For each type of aircraft that is materially altered in design, at least 50 hours of demonstration flights acceptable to the Authority shall be flown for each type of operation the AOC holder intends to conduct with that

aircraft, including a representative number of flights into en route aerodromes.

- d) No person may carry passengers in an aircraft during demonstration flights, except for those persons necessary to make the demonstration flight and those designated by the Authority.
- e) For AOC holders of aircraft of less than 5 700 kg, the necessity and extent of demonstration shall be at the option of the Authority.

IS 4.2(G) OPERATIONS MANUAL – GENERAL

(a) The general part or section of the OM shall contain at least the following:

1.0 Administration and Control of Operations Manual

1.1 Introduction.

1.1.1 A statement that the manual complies with all applicable rules and regulations and with the specific approvals, conditions, and limitations of the applicable air operator operations specifications.

1.1.2 A statement that the manual contains operational instructions that are to be complied with by the relevant personnel in the performance of their duties.

1.1.3 A list and brief description of the various OM parts and their contents, applicability, and use.

1.1.4 Explanations and definitions of terms and words used in the manual.

1.2 System of Amendment and Revision.

1.2.1 A description of who is responsible for the issuance and insertion of amendments and revisions.

1.2.2 A record of amendments and revisions with insertion dates and effective dates.

1.2.3 A statement that hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety.

1.2.4 A description of the system for the annotation of pages and their effective dates.

1.2.5 A list of effective pages and their effective dates.

1.2.6 Annotation of changes (on text pages and, as practicable, on charts and diagrams).

1.2.7 A system for recording temporary revisions.

1.2.8 A description of the distribution system for the manuals, amendments, and revisions.

1.2.9 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 Organisation and Responsibilities

2.1 Organisational Structure.

2.1.1 A description of the organisational structure, including the general company organisation and the operations department organisation.

2.1.2 The relationship between the operations department and the other

departments of the organisation.

2.1.3 In particular, the subordination and reporting lines of all divisions, departments, etc., that pertain to the safety of flight operations.

2.1.4 Instructions outlining the responsibilities of operations personnel pertaining to the conduct of flight operations.

2.2 Responsible Managers.

2.2.1 The name of each manager responsible for flight operations, the maintenance system, crew training, and ground operations.

2.2.2 A description of the function and responsibilities of each manager.

2.3 Authority, Duties, and Responsibilities of Operations Management Personnel.

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

2.4 Authority, Duties, and Responsibilities of a PIC.

A description of the authority, duties, and responsibilities of the PIC.

2.5 Authority, Duties, and Responsibilities of Crew Members Other Than the PIC.

A description of the authority, duties, and responsibilities of all required crew members.

3.0 Operational Control and Supervision

3.1 Supervision of the Operation by the AOC Holder.

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

- (a) Specifications for the operational flight plan;
- (b) Competence of operations personnel; and
- (c) 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.

3.2.1 A description of any system for promulgating information that may be of an operational nature but is supplementary to the information in the OM, including the applicability of this information and the responsibilities for its promulgation.

3.3 Safety Management System.

3.3.1 A description of the main aspects of the SMS programme required by 1.6 of these regulations, including:

- (a) Safety policy: general expectations;

- (b) Safety risk management: general expectations;
- (c) Safety assurance: general expectations; and
- (d) Safety promotion: general expectations.

3.4 Operational Control.

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

4.0 Quality System

4.1 A description of the quality system adopted.

5.0 Flight Crew

5.1 Crew Composition.

5.1.1 An explanation of the method for determining crew composition, taking into account the following:

- (a) Experience (total and type), recency, and qualification of the crew members;
- (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; and
- (c) The flight crew for each type of operation, including the designation of the succession of command.

5.2 PIC Designation.

5.2.1 The rules applicable to the designation of a PIC.

5.3 Crew Incapacitation.

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

6.0 Flight Crew, Cabin Crew, Flight Operations Officer/Flight Dispatcher, and Other Operations Personnel Qualifications

6.1 Qualifications.

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

6.2 Flight Crew.

6.2.1 Operation on more than one type or variant.

6.3 Cabin Crew.

6.3.1 Operation on more than one type or variant.

6.4 Flight Operations Officer/Flight Dispatcher.

6.5 Other Operations Personnel.

7.0 Fatigue Management

7.1 Flight Time, Flight Duty Periods, Duty Period Limitations, and Rest Requirements.

7.1.1 Flight crew;

7.1.2 Cabin crew; and

7.1.3 FOO/flight dispatcher.

7.2 FRMS (if authorised by the Authority).

8.0 Crew Health

8.1 Crew Health Precautions.

8.1.1 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) Immunisations;
- (g) Scuba diving;
- (h) Blood donation;
- (i) Meal precautions prior to and during flight;
- (j) Sleep and rest; and
- (k) Surgical operations.

9.0 Operating Procedures

9.1 Flight Preparation Instructions.

9.1.1 As applicable to the operation:

- (a) Criteria for determining the usability of aerodromes.
- (b) The method for determining minimum flight altitudes.
- (c) The method for determining aerodrome operating minima.
- (d) En route operating minima for VFR flights.
 - (1) 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 that permit a safe forced landing.

- (e) Presentation and application of aerodrome and en route operating minima.
- (f) Interpretation of meteorological information.
 - (1) Explanatory material on the decoding of meteorological forecasts and meteorological reports relevant to the area of operations, including the interpretation of conditional expressions.

9.1.2 Determination of the quantities of fuel, oil, and water-methanol carried.

- (a) This section shall include the specific instructions and methods by which the quantities of fuel, oil, and water-methanol to be carried are determined and monitored in flight. It shall also include instructions on the measurement and distribution of the fluid carried on board. Such instructions shall take account of all circumstances likely to be encountered on the flight, including the possibility of in-flight replanning, the failure of one or more of the aircraft's powerplants, and possible loss of pressurisation. The system for maintaining fuel and oil records shall also be described.
- (b) The general principles of mass and centre of gravity, including:
 - (1) The policy for using either standard and/or actual masses;
 - (2) The method for determining the applicable passenger, baggage, and cargo mass;
 - (3) The applicable passenger and baggage masses for various types of operations and aircraft;
 - (4) General instruction and information necessary for verification of the various types of mass and balance documentation in use;
 - (5) Last-minute changes to procedures;
 - (6) Seating policy and procedures; and
 - (7) A list of documents, forms, and additional information to be carried during a flight.

9.2 Ground Handling Arrangements and Procedures.

9.2.1 Fuelling procedures.

- (a) A description of fuelling procedures, including:
 - (1) Safety precautions during refuelling and defuelling, including when an auxiliary power unit is in operation or when a turbine engine is running and, if applicable, when the propeller brakes are on;
 - (2) Refuelling and defuelling when passengers are embarking, on board, or disembarking;

- (3) Precautions to be taken to avoid mixing fuels; and
- (4) A method to ensure the required amount of fuel is loaded.

9.2.2 Aircraft, passenger, and cargo handling procedures related to safety.

- (a) A description of the handling procedures to be used when allocating seats, embarking and disembarking passengers, and loading and unloading the aircraft. Further procedures, aimed at achieving safety while the aircraft is on the ramp, shall also be given. Handling procedures shall include:
 - (1) Sick passengers and persons with reduced mobility;
 - (2) The permissible size and weight of hand baggage;
 - (3) The loading and securing of items in the aircraft;
 - (4) Special loads and classification of load compartments (e.g., dangerous goods, live animals);
 - (5) The positioning of ground equipment;
 - (6) The operation of aircraft doors;
 - (7) Safety on the ramp, including fire prevention, blast, and suction areas;
 - (8) Start-up and ramp departure and arrival procedures;
 - (9) Servicing of aircraft;
 - (10) Documents and forms; and
 - (11) Multiple occupancy of aircraft seats.

9.3 Procedures for the refusal of embarkation.

- 9.3.1** 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.

9.4 De-icing and anti-icing on the ground.

- 9.4.1** Instructions for the conduct and control of ground de-icing/anti-icing operations. 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; and
 - (d) Precautions during usage.

9.5 Helicopter refuelling procedures.

9.5.1 A description of procedures for helicopter refuelling, including:

- (a) The doors on the refuelling side shall remain closed;
- (b) The door on the non-refuelling side shall remain open;
- (c) Firefighting facilities of the appropriate scale shall be immediately available in the case of a fire;
- (d) The presence of fuel vapour, if detected, shall cease the refuelling process;
- (e) The ground or deck area beneath the exits intended for emergency evacuation shall be kept clear;
- (f) Seat belts shall be unfastened to facilitate rapid egress; and
- (g) With rotors turning, only ongoing passengers shall remain on board.

9.6 Flight Procedures and Flight Navigation Equipment.

9.6.1 A description of flight procedures, including:

- (a) SOPs for each phase of flight;
- (b) Instructions on the use of normal checklists and the timing of their use;
- (c) Departure contingency procedures;
- (d) Instructions on the maintenance of altitude awareness and the use of automated or flight crew altitude call-outs;
- (e) Instructions on the use of autopilots and autothrottles in IMC;
- (f) Instructions on the clarification and acceptance of ATC clearances, particularly where terrain clearance is involved;
- (g) Departure and approach briefings;
- (h) Procedures for familiarisation with areas, routes, and aerodromes;
- (i) Stabilised approach procedure;
- (j) Limitation on high rates of descent near the surface;
- (k) Conditions required to commence or to continue an instrument approach;
- (l) Instructions for the conduct of precision and non-precision instrument approach procedures;
- (m) The allocation of flight crew duties and procedures for the management of crew workload during night and IMC instrument approach and landing operations;
- (n) The circumstances in which a radio listening watch is to be maintained; and
- (o) Instructions and training requirements for the use of automatic

landing systems, a HUD or equivalent displays and EVS, SVS or CVS equipment as applicable.

9.6.2 Navigation equipment.

- (a) A list of the navigation equipment to be carried, including any requirements relating to operations where PBN is prescribed.

9.6.3 Navigation procedures.

- (a) A description of all navigation procedures relevant to the type(s) and area(s) of operation. Consideration shall be given to:
 - (1) Standard navigation procedures, including policy for carrying out independent cross-checks of keyboard entries where these affect the flight path to be followed by the aircraft;
 - (2) In-flight replanning;
 - (3) Procedures in the event of system degradation;
 - (4) Where relevant to the operations, long-range navigation procedures, the engine failure procedure for EDTO, and the nomination and utilisation of diversion aerodromes;
 - (5) Instructions and training requirements for the avoidance of controlled flight into terrain and policy for the use of the ground proximity warning system;
 - (6) Policy, instructions, procedures, and training requirements for the avoidance of collisions and the use of the ACAS;
 - (7) Information and instructions relating to the interception of civil aircraft, including:
 - (i) Procedures, as prescribed in IS 8.8.1.28 of these regulations, for PICs of intercepted aircraft; and
 - (ii) Visual signals for use by intercepting and intercepted aircraft, as contained in IS 8.8.1.28 of these regulations; and
- (b) For aeroplanes intended to be operated above 15 000 m (49 000 ft):
 - (1) Information that will enable the pilot to determine the best course of action to take in the event of exposure to solar cosmic radiation; and
 - (2) Procedures in the event that a decision to descend is taken, covering:
 - (i) The necessity of giving the appropriate ATS unit prior warning of the situation and of obtaining a provisional descent clearance; and

- (ii) The action to be taken in the event that communication with an ATS unit cannot be established or is interrupted.

9.6.4 Policy and procedures for in-flight fuel management.

9.6.5 Adverse and potentially hazardous atmospheric conditions.

9.6.6 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.

9.6.7 Operating restrictions.

- (a) Cold weather operations;
- (b) Take-off and landing in turbulence;
- (c) Low-level wind shear operations;
- (d) Crosswind operations (including tailwind components);
- (e) High-temperature operations; and
- (f) High-altitude operations.

9.6.8 Incapacitation of crew members.

- (a) Procedures to be followed in the event of the incapacitation of crew members in flight. Examples of the types of incapacitation and the means for recognising them shall be included.

9.6.9 Cabin safety requirements.

- (a) Procedures covering:
 - (1) Cabin preparation for flight; in-flight requirements; and preparation for landing, including procedures for securing cabin and galleys;
 - (2) 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;

- (3) Procedures to be followed during passenger embarkation and disembarkation;
- (4) Procedures for fuelling with passengers on board, embarking, or disembarking;
- (5) Smoking on board; and
- (6) The use of portable electronic equipment and cellular telephones.

9.6.10 Passenger briefing procedures.

- (a) The contents, means, and timing of passenger briefing.

9.6.11 Procedures for use of cosmic or solar radiation detection equipment – aeroplanes.

- (a) 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 OM are exceeded. In addition, the procedures, including ATC procedures, to be followed in the event that a decision to descend or reroute is taken.

9.7 All-Weather Operations.

9.8 Use of the Minimum Equipment List and Configuration Deviation List.

9.9 Non-Revenue Flights.

9.9.1 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 type of persons who may be carried on such flights.

9.10 Oxygen Requirements.

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

10.0 Dangerous Goods and Weapons

10.1 Transport of Dangerous Goods.

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

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

10.2 Transport of Weapons.

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

11.0 Security

11.1 Security Policies and Procedures.

11.1.1 A description of security policies and procedures for handling and reporting crime (e.g., unlawful interference, sabotage, bomb threats, and hijacking) on board.

11.2 Security Instructions and Guidance.

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

11.3 Preventive Security Measures and Training.

11.3.1 A description of preventive security measures and training.

12.0 Handling of Accidents and Incidents

12.1 Procedures for the Handling, Notifying, and Reporting of Accidents and Incidents.

12.1.1 This section shall include:

- (a) Definitions of accidents and incidents and the relevant responsibilities of all persons involved;
- (b) Descriptions of the company departments, authorities, or other institutions that shall be notified in case of an accident or incident, and by which means and in what sequence;
- (c) Special notification requirements in the event of an accident or incident when dangerous goods are being carried;
- (d) A description of the requirements to report accidents and incidents;
- (e) The forms used for reporting accidents and incidents and the procedure for submitting such forms to the Authority;

- (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; and
- (g) Procedures for PICs who have observed an accident or incident.

13.0 Rules of the Air

13.1 Rules of the air, including:

13.1.1 Territorial application of the Rules of the Air;

13.1.2 The circumstances during which a radio listening watch shall be maintained;

13.1.3 ATC clearances, adherence to flight plan, and position reports;

13.1.4 The ground-air visual codes for use by survivors, description and use of signal aids; and

13.1.5 Distress and urgency signals.

IS 4.3 TRAINING MANUAL

- a) Each AOC holder and AOC applicant, as part of its OM, shall submit and maintain training programmes based on the following outline:

1.0 Training Syllabi and Checking Programmes

1.1 General Requirements.

1.1.1 Training syllabi and checking programmes 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 any person in, nor may any person serve in, a required crew member 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 The training syllabi and checking programmes for flight crew members shall include:

- (a) A written training programme acceptable to the Authority that provides for basic indoctrination, initial, transition, difference, and recurrent training, as appropriate, for flight crew members for each type of aircraft flown by that crew member; this written training programme shall include both normal and emergency procedures training applicable for each type of aircraft flown by the crew member;
- (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) An adequate number of ground and flight check personnel to ensure adequate training and checking of flight crew members; and
- (e) A record system acceptable to the Authority to show compliance with appropriate training and currency requirements.

1.3 Cabin Crew.

1.3.1 The training syllabi and checking programmes 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 OM;
- (d) Appropriate emergency training, as required by the Authority and the AOC holder's OM;
- (e) Appropriate flight training;
- (f) Appropriate recurrent, transition, or difference training, as required, to maintain currency in any type and variance of aircraft the crew member may be required to work in;
- (g) 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;

(h) An adequate number of ground check personnel and flight check personnel to ensure adequate training and checking of crew members; and

(i) A record system acceptable to the Authority to show compliance with all appropriate training and currency requirements.

1.4 All Crew Members.

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

- (a) Individual instruction in the use of on-board emergency equipment such as fire extinguishers, emergency breathing equipment, first aid equipment, emergency exits and evacuation slides, and the aircraft's oxygen system, including the use of portable emergency oxygen bottles. Flight crew members shall also practice using the emergency equipment designed to protect them in case of a flight deck fire or smoke;
- (b) Instruction in potential emergencies such as rapid decompression,

ditching, firefighting, aircraft evacuation, medical emergencies, hijacking, and disruptive passengers; and

- (c) Scheduled recurrent training to meet Authority requirements.

1.5 All Operations Personnel.

1.5.1 The training syllabi and checking programmes 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, labelling, and documentation of dangerous articles and magnetised materials;
- (b) All appropriate security training required by the Authority; and
- (c) A method of providing any required notification of an accident or incident involving dangerous goods.

1.6 Operations Personnel Other Than Crew Members.

1.6.1 For operations personnel other than crew members (e.g., FOO, handling personnel), a written training programme shall be developed that pertains to their respective duties. The training programme shall provide for initial, recurrent, differences, specialised, and any other training required by the Authority.

2.0 Procedures for Training and Checking

2.1 Proficiency Checking Procedures.

2.1.1 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.

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

3.0 Document Retention

3.1 Documentation to Be Stored and Storage Periods.

3.1.1 An AOC holder shall retain all documentation required by the Authority, or the Authority of another State 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 OM, whichever is longer.

IS 4.4 AIRCRAFT OPERATING MANUAL

- a) Each AOC applicant and AOC holder shall submit and maintain an AOM as part of its OM, containing at least the following:

<p>1.0 General Information and Units of Measurement</p> <p>1.1 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.</p> <p>2.0 Limitations</p> <p>2.1 Certification and Operational Limitations.</p> <p>2.1.1 A description of the applicable operational limitations, including:</p> <ul style="list-style-type: none">(a) Certification status;(b) Passenger seating configuration for each aircraft type, including a pictorial presentation;(c) Types of operation that are approved (e.g., AMO/IMC/VFR, CAT II/III, flights in known icing conditions, etc.);(d) Crew composition;(e) Operation 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. <p>3.0 Procedures</p> <p>3.1 Normal Procedures.</p> <p>3.1.1 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 coordination procedures between flight and cabin crew. The following normal procedures and duties shall be included:</p> <ul style="list-style-type: none">(a) Pre-flight;(b) Pre-departure and loading;
<ul style="list-style-type: none">(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 Flight Deck Procedures.

- (a) Specific flight deck procedures to obtain a flight release;
- (b) Initial flight deck preparation;
- (c) SOPs;
- (d) Flight deck discipline;
- (e) Standard call-outs;
- (f) Communications;
- (g) Flight safety;
- (h) Push-back and towing procedures;
- (i) Taxi guidelines and ramp signals;
- (j) Take-off and climbout procedures;
- (k) Choice of runway;
- (l) Take-off in limited visibility;
- (m) Take-off in adverse weather;
- (n) Use and limitations of weather radar;
- (o) Use of landing lights;
- (p) Monitoring of flight instruments;
- (q) Power settings for take-off;
- (r) Malfunctions during take-off;
- (s) Rejected take-off decision;
- (t) Climb, best angle, best rate;
- (u) Sterile cockpit procedures;
- (v) En route and holding procedures;
- (w) Cruise control;
- (x) Navigation logbook;

- (y) Descent, approach, and landing procedures;
- (z) Reporting of maintenance problems; and
- (aa) How to obtain maintenance and service en route.

3.3 Abnormal and Emergency Procedures.

3.3.1 A listing of abnormal and emergency procedures assigned to crew members with appropriate checklists that include a system for use of the checklists and a statement covering the necessary coordination procedures between flight and cabin crew. The following abnormal and emergency procedures and duties shall be included:

- (a) Crew incapacitation;
- (b) Fire and smoke drills;
- (c) Unpressurised and partially pressurised flight, as applicable;
- (d) Exceeding of structural limits, such as overweight landing;
- (e) Exceeding of cosmic radiation limits, as applicable;
- (f) Lightning strikes;
- (g) Distress communications and alerting of ATC to emergencies;
- (h) Engine failure;
- (i) System failures;
- (j) Guidance for diversion in case of serious technical failure;
- (k) Ground proximity warning;
- (l) ACAS;
- (m) Wind shear;
- (n) Emergency landing/ditching;
- (o) Aircraft evacuation;
- (p) Fuel jettisoning precautions (as applicable) and overweight landing;
- (q) General considerations and policy;
- (r) Emergency procedures;
- (s) Emergency descent;
- (t) Low fuel;
- (u) Dangerous goods incident or accident;
- (v) Interception procedures;
- (w) Emergency signal for cabin crew members;
- (x) Communication procedures; and
- (y) Radio listening watch.

4.0 Performance Data, Supplementary Performance Data, and Other Acceptable Performance Data

4.1 General.

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

4.2 Performance Data.

4.2.1 Performance material that provides the necessary data to allow the flight crew to comply with the approved AFM performance requirements shall be included to allow the determination of:

- (a) Take-off climb limits (mass, altitude, temperature);
- (b) Take-off field length limits (dry, wet, contaminated);
- (c) Net flight path data for obstacle clearance calculation or, where applicable, take-off flight path;
- (d) Gradient losses for banked climbouts;
- (e) En route climb limits;
- (f) Approach climb limits;
- (g) Landing climb limits;
- (h) Landing field length limits (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).

4.3 Supplementary Performance Data.

4.3.1 Supplementary data covering:

4.3.2 Flights in icing conditions;

4.3.3 The maximum crosswind and tailwind components for each aircraft type operated and the reductions to be applied to these values having regard to gust, low visibility, runway surface conditions, crew experience, use of autopilot, abnormal or emergency circumstances, or any other relevant operational factors; and

4.3.4 Any certified performance related to an allowable configuration, or configuration deviation, such as anti-skid inoperative, shall be included.

4.4 Other Acceptable Performance Data.

4.4.1 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 OM may contain cross references to the approved data contained in the AFM, where such data is not likely to be used often or in an emergency.

4.5 Additional Performance Data.

4.5.1 Additional performance data, where applicable, including:

- (a) All engines operating climb gradients;
- (b) Drift-down data;
- (c) The effect of de-icing/anti-icing fluids;
- (d) Flight with landing gear down;

(e) For aircraft with three or more engines, one-engine-inoperative ferry flights; and

(f) Flights conducted under the provisions of a CDL.

5.0 Flight Planning

5.1 Flight Planning Data.

5.1.1 Specific data and instructions necessary for pre-flight and in-flight planning, including factors such as speed schedules and power settings. Where applicable, procedures for engine(s) out operations, EDTO, and flights to isolated aerodromes shall be included for the flight plan and the operational flight plan.

5.2 Fuel and Oil Calculations.

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

6.0 Mass and Balance

6.1 Calculating Mass and Balance.

6.1.1 Instructions and data for calculating mass and balance, including:

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

7.0 Loading

7.1 Loading Procedures.

7.1.1 Instructions for loading and securing a load in the aircraft, including:

- (a) Use of aircraft systems and associated controls.

7.2 Loading Dangerous Goods.

7.2.1 A method for notifying the PIC when dangerous goods are loaded in the aircraft.

8.0 Survival and Emergency Equipment Including Oxygen

8.1 List of Survival Equipment to Be Carried.

	<p>8.1.1 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.</p> <p>8.1.2 Instructions regarding the location, accessibility, and use of survival and emergency equipment and its associated checklist(s).</p> <p>8.2 Ground-Air Visual Signal.</p> <p>8.2.1 Instructions illustrating the ground-air visual signal code for use by survivors.</p> <p>8.3 Oxygen Usage.</p> <p>8.3.1 The procedure for determining the amount of oxygen required and the quantity that is available, taking into consideration the flight profile, number of occupants, and possible cabin decompression.</p> <p>8.3.2 The information provided shall be in a form in which it can be used without difficulty.</p>
	<p>8.4 Emergency Equipment Usage.</p> <p>8.4.1 A description of the proper use of the following emergency equipment, if applicable:</p> <ul style="list-style-type: none"> (a) Life jackets; (b) Life rafts; (c) Medical kits/first aid kits; (d) Survival kits; (e) Emergency locator transmitter; (f) Visual signalling devices; (g) Evacuation slides; and (h) Emergency lighting. <p>9.0 Emergency Evacuation Procedures</p> <p>9.1 Instructions for Emergency Evacuation.</p> <p>9.1.1 Instructions for preparing for emergency evacuation, including crew coordination and emergency station assignment.</p> <p>9.2 Emergency Evacuation Procedures.</p> <p>9.2.1 A description of the duties of all members of the crew for the rapid evacuation of an aircraft and the handling of passengers in the event of a forced landing, ditching, or other emergency.</p> <p>10.0 Aircraft Systems</p> <p>10.1 A description of the aircraft systems, related controls and indications, and operating instructions.</p> <p>11.0 Minimum Equipment List and Configuration Deviation List</p>

11.1 The MEL and CDL for the aircraft types operated and the specific operations authorised, including any requirements relating to operations where PBN is prescribed.

12.0 Route and Aerodrome Instructions and Information (optional for this manual)

13.0 Instructions and Information

13.1 Communications, navigation, and aerodromes.

13.1.1 Instructions and information relating to communications, navigation, and aerodromes, including:

- (a) Minimum flight level/altitude for each route to be flown;
- (b) Operating minima for departure, destination, and alternate aerodromes;
- (c) Communication facilities and navigation aids;
- (d) Runway data and aerodrome 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 for checking their validity;
- (i) Availability of aeronautical information and meteorological services;
- (j) En route COM/NAV procedures, including holding; and
- (k) Aerodrome categorisation for flight crew competence qualification.

IS 4.18 PASSENGER BRIEFING CARDS

- a) Each AOC holder shall, at each exit seat, provide passenger briefing 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, including how to:
 - i) Locate the emergency exit;
 - ii) Recognise 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 it will not impede the use of the exit;
 - viii) Assess the condition of an escape slide, activate the slide, and stabilise 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; and
 - xi) A request that a passenger identify himself or herself to allow reseating if he or she:
 - xii) Is less than 15 years of age or lacks the capacity to perform one or more of the applicable functions listed in paragraph (a)(1) of this IS without the assistance of an adult companion, parent, or other relative;
 - xiii) Cannot perform the emergency functions stated in the information card;
 - xiv) Has an indiscernible condition that will prevent him or her from performing the emergency functions;
 - xv) May suffer bodily harm as a result of performing one or more of the emergency functions;
 - xvi) Does not wish to perform the emergency functions; or
 - xvii) Lacks the ability to read, speak, or understand the language or the graphic form in which instructions are provided by the AOC holder.

IS 4.19 AERONAUTICAL DATA CONTROL SYSTEM

- (e) Each AOC holder shall provide aeronautical data about each aerodrome used by the AOC holder, to include the following:
- (xv) Aerodromes and heliports:
 - i) Facilities;
 - ii) Public protection;
 - iii) Navigation and communication aids;
 - iv) Construction affecting take-off, landing, or ground operations; and
 - v) Air traffic facilities.
 - (xvi) Runways, clearways, and stopways:
 - i) Dimensions;
 - ii) Surface;

- iii) Marking and lighting systems; and
 - iv) Elevation and gradient.
- 3) Displaced thresholds:
 - i) Location;
 - ii) Dimensions; and
 - iii) Take-off, landing, or both.
- 4) Obstacles:
 - i) Those affecting take-off and landing performance computations; and
 - ii) Controlling obstacles.
- 5) Instrument flight procedures:
 - i) Departure procedure;
 - ii) Approach procedure; and
 - iii) Missed approach procedure.
- 6) Special information:
 - i) RVR measurement equipment; and
 - ii) Prevailing winds under low-visibility conditions.

IS 4.20 ROUTE GUIDE – AREAS, ROUTES, AERODROMES, AND HELIPORTS

- a) Each AOC applicant and AOC holder shall submit and maintain as part of its OM a route guide containing information on areas, routes, aerodromes, and heliports. The route guide shall contain at least the information in IS 4.1.20(c).
- b) The route guide shall ensure that the flight crew have, for each flight, information relating to communication facilities, navigation aids, aerodromes, heliports, instrument approaches, instrument arrivals, and instrument departures, as applicable for the operation, and such other information as the operator may deem necessary in the proper conduct of flight operations.
- c) Each route guide shall contain at least the following information:
 - 1) The minimum flight altitudes for each aircraft to be flown;
 - 2) Aerodrome operating minima for each of the aerodromes that are likely to be used as aerodromes of intended landing or as alternate aerodromes;
 - 3) The increase of aerodrome operating minima in case of degradation of approach or aerodrome facilities;
 - 4) Heliport operating minima for each of the heliports that are likely to be used as heliports of intended landing or as alternate heliports;
 - 5) The increase of heliport operating minima in case of degradation of approach or heliport facilities; and
 - 6) The necessary information for compliance with all flight profiles required by regulations, including the determination of:
 - i) Take-off runway length requirements for dry, wet, and contaminated conditions, including those dictated by systems failures that affect the take-off distance;
 - ii) Take-off climb limitations;
 - iii) En route climb limitations;
 - iv) Approach climb limitations and landing climb limitations;
 - v) Landing runway length requirements for dry, wet, and contaminated conditions, including systems failures that affect the landing distance; and
 - vi) Supplementary information, such as tire speed limitations.

IS 4.21 WEATHER REPORTING SOURCES

- a) The Authority approves the following sources of weather reports and considers the reports from these sources satisfactory for flight planning or for controlling flight movement:
- 1) [STATE METEOROLOGICAL OFFICE];
 - 2) Sierra Leone -operated automated surface observation stations;
 - 3) Sierra Leone -operated supplemental aviation weather reporting stations;
 - 4) Observations taken by aerodrome traffic control towers;
 - 5) Sierra Leone -contracted weather observatories;
 - 6) Any active meteorological office operated by a foreign state that subscribes to the ICAO Standards and practices;
 - 7) Any military weather-reporting sources approved by the Authority;
 - 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; and
 - 9) A weather reporting system operated and maintained by the AOC holder and approved by the Authority.

IS 4.22 DE-ICING AND ANTI-ICING PROGRAMME

- a) The AOC holder's ground de-icing and anti-icing programme 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 de-icing and anti-icing operational procedures shall be in effect;
 - 2) Who is responsible for deciding that ground de-icing and anti-icing operational procedures shall be in effect;
 - 3) The procedures for implementing ground de-icing 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 de-icing 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., FOOs/flight dispatchers, ground personnel, contract personnel) shall cover the specific requirements of the approved de-icing and anti-icing programme and each person's responsibilities and duties under the approved programme, including:
- 1) The use of holdover times;
 - 2) Aircraft de-icing/anti-icing procedures, including inspection and check procedures and responsibilities;
 - 3) Communication procedures;
 - 4) Aircraft surface contamination (e.g., 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 de-icing/anti-icing fluids;
 - 6) Cold weather pre-flight inspection procedures; and
 - 7) Techniques for recognising contamination on the aircraft.

- c) The AOC holder's de-icing and anti-icing programme 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 5 minutes prior to beginning take-off) to determine that the wings, control surfaces, and other critical surfaces, as defined in the AOC holder's de-icing and anti-icing programme, 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 de-icing and anti-icing programme, 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, as defined in the AOC holder's de-icing and anti-icing programme, are de-iced again and a new holdover time is determined.

IS 4.24 FATIGUE RISK MANAGEMENT SYSTEM

- a) An FRMS shall contain, at a minimum:
 - 1) FRMS policy and documentation;
 - 2) Fatigue risk management processes;
 - 3) FRMS safety assurance process; and
 - 4) FRMS promotion processes.
- b) The operator shall define its FRMS policy, with all elements of the FRMS clearly identified.
- c) The FRMS policy shall require that the scope of FRMS operations be clearly defined in the OM.
- d) The FRMS policy shall:
 - 1) Reflect the shared responsibility of management, flight and cabin crew members, and all other involved personnel;
 - 2) Clearly state the safety objectives of the FRMS;
 - 3) Be signed by the accountable manager of the organisation;
 - 4) Be communicated, with visible endorsement, to all the relevant areas and levels of the organisation;
 - 5) Declare management commitment to effective safety reporting;
 - 6) Declare management commitment to the provision of adequate resources for the FRMS;
 - 7) Declare management commitment to continuous improvement of the FRMS;
 - 8) Require that clear lines of accountability for management, flight and cabin crew members, and all other involved personnel are identified; and
 - 9) Require periodic reviews to ensure it remains relevant and appropriate.
- e) FRMS DOCUMENTATION.
 - 1) An operator shall develop and keep current FRMS documentation that describes and records:
 - i) FRMS policy and objectives;
 - ii) FRMS processes and procedures;
 - iii) Accountabilities, responsibilities, and authorities for these processes and procedures;

- iv) Mechanisms for ongoing involvement of management, flight and cabin crew members, and all other involved personnel;
 - v) FRMS training programmes, training requirements, and attendance records;
 - vi) Scheduled and actual flight times, duty periods, and rest periods, with significant deviations and reasons for deviations noted; and
 - vii) FRMS outputs, including findings from collected data, recommendations, and actions taken.
- f) **FATIGUE RISK MANAGEMENT PROCESSES – IDENTIFICATION OF HAZARDS.**
- 1) An operator shall develop and maintain three fundamental and documented processes for fatigue hazard identification:
 - i) **PREDICTIVE.** The predictive process shall identify fatigue hazards by examining crew scheduling and taking into account factors known to affect sleep and fatigue and their effects on performance. Methods of examination may include, but are not limited to:
 - A) Operator or industry operational experience and data collected on similar types of operations;
 - B) Evidence-based scheduling practices; and
 - C) Biomathematical Sierra Leones.
 - ii) **PROACTIVE.** The proactive process shall identify fatigue hazards within current flight operations. Methods of examination may include, but are not limited to:
 - A) Self-reporting of fatigue risks;
 - B) Crew fatigue surveys;
 - C) Relevant flight and cabin crew performance data;
 - D) Available safety databases and scientific studies; and
 - E) Analysis of planned versus actual time worked.
 - iii) **REACTIVE.** The reactive process shall identify the contribution of fatigue hazards to reports and events associated with potential negative safety consequences in order to determine how the impact of fatigue could have been minimised. At a minimum, the process may be triggered by any of the following:
 - A) Fatigue reports;
 - B) Confidential reports;
 - C) Audit reports;
 - D) Incidents; and
 - E) Flight data analysis events.
- g) **RISK ASSESSMENT.**
- 1) An operator shall develop and implement risk assessment procedures that determine the probability and potential severity of fatigue-related events and identify when the associated risks require mitigation. The risk assessment procedures shall review identified hazards and link them to:
 - i) Operational processes;
 - ii) Their probability;
 - iii) Possible consequences; and
 - iv) The effectiveness of existing safety barriers and controls.
- h) **RISK MITIGATION.**
- 1) An operator shall develop and implement risk mitigation procedures that:

- i) Select the appropriate mitigation strategies;
 - ii) Implement the mitigation strategies; and
 - iii) Monitor the implementation and effectiveness of the strategies.
- i) **FRMS SAFETY ASSURANCE PROCESS.**
 - 1) The operator shall develop and maintain an FRMS safety assurance process to:
 - i) Provide for continuous FRMS performance monitoring, analysis of trends, and measurement to validate the effectiveness of the fatigue safety risk controls. The sources of data may include:
 - A) Hazard reporting and investigations;
 - B) Audits and surveys; and
 - C) Reviews and fatigue studies.
 - ii) Provide a formal process for the management of change, which shall include:
 - A) Identification of changes in the operational environment that may affect FRMS;
 - B) Identification of changes within the organisation that may affect FRMS; and
 - C) Consideration of available tools that could be used to maintain or improve FRMS performance prior to implementing changes.
 - iii) Provide for the continuous improvement of the FRMS, which shall include:
 - A) The elimination and/or modification of risk controls that have had unintended consequences or that are no longer needed due to changes in the operational or organisational environment;
 - B) Routine evaluations of facilities, equipment, documentation, and procedures; and
 - C) The determination of the need to introduce new processes and procedures to mitigate emerging fatigue-related risks.
- j) **FRMS PROMOTION PROCESS.**
 - 1) An operator shall develop an FRMS promotion process that supports the ongoing development of the FRMS, the continuous improvement of its overall performance, and attainment of optimum safety levels. The following shall be established and implemented by the operator as part of its FRMS:
 - i) Training programmes to ensure competency commensurate with the roles and responsibilities of management, flight and cabin crew members, and all other involved personnel under the planned FRMS; and
 - ii) An effective FRMS communications plan that:
 - A) Explains FRMS policies, procedures, and responsibilities to all relevant stakeholders; and
 - B) Describes communication channels used to gather and disseminate FRMS-related information.

IS 5.4 MAINTENANCE CONTROL MANUAL

- a) Each AOC applicant and AOC holder shall submit and maintain an MCM containing at least the following:

1.0 Administration and Control of the Maintenance Control Manual

1.1 Introduction.

- 1.1.1** A statement that the manual complies with all applicable Authority regulations and requirements and with the terms and conditions of the applicable AOC;
- 1.1.2** A statement that the manual contains maintenance and operational instructions with which the relevant personnel are to comply in the performance of their duties;
- 1.1.3** A list and brief description of the various MCM parts and their contents, applicability, and use; and
- 1.1.4** Explanations and definitions of terms and words used in the manual.

1.2 System of Amendment and Revision.

- 1.2.1** A description of who is responsible for the issuance and insertion of amendments and revisions;
- 1.2.2** A required record of amendments and revisions with insertion dates and effective dates;
- 1.2.3** A statement that hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety;
- 1.2.4** A description of the system for the annotation of pages and their effective dates;
- 1.2.5** A list of effective pages and their effective dates;
- 1.2.6** Annotation of changes (on text pages and, as practicable, on charts and diagrams);
- 1.2.7** A system for recording temporary revisions;
- 1.2.8** A description of the distribution system for the manuals, amendments, and revisions; and
- 1.2.9** A statement of who is responsible for notifying the Authority of proposed changes and for working with the Authority on changes requiring Authority approval.

2.0 General Organisation

2.1 Corporate Commitment by the AOC Holder.

2.2 General Information.

- 2.2.1** A brief description of the organisation;
- 2.2.2** A description of the organisation's relationships with other organisations;

	<ul style="list-style-type: none"> 2.2.3 Fleet composition; 2.2.4 The type of operation; and 2.2.5 Line station locations.
2.3	Maintenance Management Personnel. <ul style="list-style-type: none"> 2.3.1 Accountable manager; 2.3.2 Nominated post holder;
	<ul style="list-style-type: none"> 2.3.3 Maintenance coordination; 2.3.4 Duties and responsibilities; 2.3.5 Organisation chart(s); and 2.3.6 Manpower resources and training policy.
2.4	Notification Procedure to the Authority Regarding Changes to the Maintenance Arrangements, Locations, Personnel, Activities, or Approval.
3.0	Maintenance Procedures
3.1	Aircraft Logbook Utilisation and MEL Application.
3.2	Aircraft Maintenance Programme Development and Amendment.
3.3	Time and Maintenance Records, Responsibilities, and Retention.
3.4	Accomplishment and Control of Mandatory Continuing Airworthiness Information (Airworthiness Directives).
3.5	Analysis of the Effectiveness of the Maintenance Programme.
3.6	Non-Mandatory Modification Embodiment Policy.
3.7	Major Modification Standards.
3.8	Defect Reports. <ul style="list-style-type: none"> 3.8.1 Analysis; 3.8.2 Liaison with manufacturers and Authorities; and 3.8.3 Deferred defect policy.
3.9	Engineering Activity.
3.10	Reliability Programmes. <ul style="list-style-type: none"> 3.10.1 Airframe; 3.10.2 Propulsion; and 3.10.3 Components.
3.11	Pre-Flight Inspection. <ul style="list-style-type: none"> 3.11.1 Preparation of aircraft for flight; 3.11.2 Subcontracted ground handling functions; 3.11.3 Security of cargo and baggage loading; 3.11.4 Control of refuelling, quantity/quality; and

3.11.5 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 of Documents, Tags, and Forms Used.

3.15 Appropriate Portions of the AOC Holder's Operations Manual.