## **Democratic Socialist Republic of Sri Lanka**



# Civil Aviation Authority of Sri Lanka

## **Implementing Standards**

(Issued under Sec. 120, Civil Aviation Act No. 14 of 2010)

# Title: Compliance to Annex-6-Part 1 – Chapter 8- Aeroplane Maintenance

**Reference No.:** IS-6-(i)-8 **SLCAIS**: 017 **Date**: 30<sup>th</sup> March 2018

Pursuant to Sec. 120 of the Civil Aviation Act No.14 of 2010, Director General of Civil Aviation shall have the power to issue, whenever he considers it necessary or appropriate to do so, such Implementing Standards for the purpose of giving effect to any of the provisions of the Civil Aviation Act, any regulations or rules made thereunder including the Articles of the Convention on International Civil Aviation which are specified in the Schedule to the Act.

Accordingly, the undersigned being the Director General of Civil Aviation do hereby issue the Implementing Standards as mentioned in the Attachment hereto [Ref:IS-6-(i)-8-Att-01], for the purpose of giving effect to the provisions in the aforementioned Act and Standards & Procedures described under Article 37 of the Convention, which are specified in the Attachment.

This document supersedes the Implementing Standard 058 issued by the DGCA and shall be treated as null and void.

These Implementing Standards shall come into force with immediate effect and remain in force unless revoked.

Attention is also drawn to sec. 103 of the Act, which states inter alia that failure to comply with Implementing Standard is an offence.

H.M.C. Nimalsiri Director General of Civil Aviation and Chief Executive Officer

Civil Aviation Authority of Sri Lanka 04, Hunupitiya Road Colombo 02.

Enclosure: Attachment No. IS-6-(i)-8-Att-01

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# **Implementing Standards**

## Title: Compliance to Annex-6-Part 1 – Chapter 8- Aeroplane Maintenance

### **GENERAL:**

- i. Requirements contained in this document are based on the amendment 42 of the 10<sup>th</sup> edition of ICAO Annex 6 Part I "Operation of Aircraft" Chapter 8 Aeroplane Maintenance.
- ii. The requirements contained in this document are applicable to person/organizations holding an air operator certificate issued by Director-General of Civil Aviation, Sri Lanka for commercial air transportation and prospective applicants for air operator certificate for commercial air transportation.
- iii. Holders of Air Operator Certificate issued by the DGCA for commercial air transportation shall comply with the requirements published in this document and are hereby instructed to forward to the DGCA a "Declaration of Conformance" which indicates the degree of compliance with each item detailed in the document.
- iv. This document supersedes the Implementing Standard 058 issued by the DGCA and shall be treated as null and void.
- v. This document makes reference to relevant parts of Implementing Standards SLCAIS 080 "Requirements for Continuing Airworthiness" & SLCAIS 056 "General Requirements to be Satisfied by Aircraft Maintenance Organizations for Approval" issued by the DGCA, where such reference is made the relevant SLCAIS and referred parts shall be consulted for detailed requirements.
- vi. This document may be amended from time to time and the amendments will be reflected with the vertical line on the right side of the text.

### REQUIREMENT FOR AIRCRAFT MAINTENANCE

- **Note 1:** For the purpose of this chapter, "aeroplane" includes: engines, propellers, components, accessories, instruments, equipment and apparatus including emergency equipment.
- Note 2: Reference is made throughout this chapter to the requirements of the DGCA. When the State of the Operator is not the same as the State of Registry, it may be necessary to consider any additional requirements of the State of the Operator.
- *Note 3:* Guidance on continuing airworthiness requirements is contained in the Airworthiness Manual (Doc 9760).

### 1. Operator's Maintenance Responsibilities

- **1.1** An Operator shall ensure that, in accordance with procedures acceptable to the Director General of Civil Aviation (DGCA).
  - a. each aeroplane they operate is maintained in an airworthy condition;

- b. the operational and emergency equipment necessary for an intended flight is serviceable;
- c. the Certificate of Airworthiness of each aeroplane they operate remains valid.

Note. – refer SLCAIS 080, M.A. 201 (a) "Responsibilities"

1.2 An operator shall not operate an aeroplane unless it is maintained and released to service by an organization approved in accordance with section 7 in this IS, or under an equivalent system, either of which shall be acceptable to the DGCA.

Note. - refer SLCAIS 080, M.A. 201 (g) "Responsibilities"

1.3 When the DGCA accepts an equivalent system; the person signing the maintenance release shall be licensed in accordance with Implementing Standard - IS 66.

*Note.* – refer SLCAIS 056 "General Requirements to be satisfied by Aircraft Maintenance Organizations for Approval"

**1.4** An operator shall employ a person or group of persons to ensure that all maintenance is carried out in accordance with the maintenance control manual.

Note. - refer SLCAIS 080, M.A. 704 "Continuing Airworthiness Management Exposition"

**1.5** The operator shall ensure that the maintenance of its aeroplanes is performed in accordance with the maintenance Programme.

Note. - refer SLCAIS 080, M.A. 201 (a) "Responsibilities"

### 2. Operator's Maintenance Control Manual

2.1 The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a Maintenance Control Manual, which shall be approved by the DGCA, in accordance with the requirements specified of paragraph 2 in Implementing Standard 020. The design of the Manual shall observe Human Factors principles. Guidance material on the application of Human Factors principles can be found in the Human Factors Training Manual (Doc. 9683)

Note. – refer SLCAIS 080, M.A. 704 "Continuing Airworthiness Management Exposition" & SLCAIS 056, 145.A.70 "Maintenance Organization Exposition"

2.2 The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained therein up to date.

Note. – refer SLCAIS 080, M.A. 704 "Continuing Airworthiness Management Exposition" & SLCAIS 056, 145.A.70 "Maintenance Organization Exposition"

- 2.3 Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.
- 2.4 The operator shall provide the DGCA with a copy of the operator's maintenance control manual, together with all amendments and/or revisions to it and shall incorporate in it such mandatory material as the DGCA may require.

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### 3. Maintenance Programme

3.1 The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance Programme, approved by the DGCA, containing the information required by paragraph 3 in implementing standard 020.

**Note:** Operators are advised that the Guidance material on the application of Human Factors principles can be found in the Human Factors Training Manual (ICAO Doc 9683).

Note. – refer SLCAIS 080, M.A. 302 "Aircraft Maintenance Programme"

3.2 Copies of all amendments to the maintenance Programme shall be furnished promptly to all organizations or persons to whom the maintenance Programme has been issued.

#### 4. Maintenance Records

- 4.1 An operator shall ensure that the following records are kept for the periods mentioned in paragraph 4.2 in this IS;
  - a. the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life limited components;
  - b. the current status of compliance with all mandatory continuing airworthiness information;
  - c. appropriate details of modifications and repairs;
  - d. the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components subject to a mandatory overhaul life;
  - e. the current status of the aeroplane's compliance with the maintenance programme; and
  - f. the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
  - g. Weight and Balance records.
  - h. Copy of maintenance record entries, which are carried in the aircraft, shall be kept in a safe place on ground.

Note. – refer SLCAIS 080, M.A. 305 "Aircraft Continuing Airworthiness Record System"

4.2 The records in paragraph 4.1 a) to e) in above shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in paragraph 4.1 f) to h) in above for a minimum period of two (02) / one (01) years after the signing of the maintenance release.

Note. – refer SLCAIS 080, M.A. 305 "Aircraft Continuing Airworthiness Record System"

- 4.3 In the event of a temporary change of operator, the records shall be made available to the new operator. In the event of any permanent change of operator, the records shall be transferred to the new operator.
  - **Note 1.-In** the context of 4.3 above, a judgment on what should be considered as a temporary change of operator will need to be made by the DGCA in the light of the need to exercise control over the records, which will depend on access to them and the opportunity to update them.
  - Note 2. refer SLCAIS 080, M.A. 307 "Transfer of Aircraft Continuing Airworthiness Records"

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## 5. Continuing Airworthiness Information

5.1 The operator of an aeroplane over 5 700 kg maximum certificated take-off mass shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide the information as specified by the DGCA and report through the system specified in Implementing Standard -M – Requirements for Continuing Airworthiness

**Note**. – refer SLCAIS 080, M.A. 302 "Aircraft Maintenance Programme – Reliability Programmes"

5.2 The operator of an aeroplane over 5 700 kg maximum certificated take-off mass shall obtain and assess continuing airworthiness information and recommendations available from the organization responsible for the type design and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the DGCA.

**Note 1:** Operators are advised that the Guidance on the interpretation of "the organization responsible for the type design" is contained in the Airworthiness Manual (ICAO Doc 9760).

Note 2: - refer SLCAIS 080, M.A. 303 "Airworthiness Directives"

### **6.** Modifications and Repairs

All modifications and repairs shall comply with airworthiness requirements acceptable to the DGCA. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

Note. - refer SLCAIS 080, M.A. 304 "Data for Modifications and Repairs"

## 7. Approved Maintenance Organization

### 7.1 Issue of Approval

- **7.1.1** The issue of a maintenance organization approval by the DGCA shall be dependent upon the applicant demonstrating compliance with the requirements of specified below in section 7 of this IS for such organizations. And the relevant provisions contained in Regulations on Civil Aviation Safety Management No. 01 of 2017 / Annex 19 for such organizations.
- **7.1.2** The approval document shall contain at least the following:
  - a organization's name and location;
  - b date of issue and period of validity;
  - c terms of approval.
- **7.1.3** The continued validity of the approval shall depend upon the organization remaining in compliance with the requirements of section 7 of this IS and with the relevant provisions contained in Safety Management No. 01 of 2017 / Annex 19 for an approved maintenance organization.

**Note:** - refer SLCAIS 056 "General Requirements to be satisfied by Aircraft Maintenance Organizations for Approval"

## 7.2 Maintenance Organizations Procedures Manual

- **7.2.1** The maintenance organization shall provide for the use and guidance of maintenance personnel concerned a procedures manual which may be issued in separate parts containing the following information:
  - a. a general description of the scope of work authorized under the organization's terms of approval;
  - b. a description of the organization's procedures and quality or inspection system in accordance with 7.4 below;
  - c. a general description of the organization's facilities;
  - d. names and duties of the person or persons required by paragraph 7.6.1 below;
  - e. a description of the procedures used to establish the competence of maintenance personnel as required by paragraph 7.6.3 below;
  - f. a description of the method used for the completion and retention of the maintenance records required by paragraph 7.7 below;
  - g. a description of the procedures for preparing the maintenance release and the circumstances under which the release is to be signed;
  - h. the personnel authorized to sign the maintenance release and the scope of their authorization:
  - i. a description, when applicable, of the additional procedures for complying with an operator's maintenance procedures and requirements;
  - j. a description of the procedures for complying with the service information reporting requirements of Implementing Standard -M Requirements for Continuing Airworthiness; and
  - k. a description of the procedure for receiving, assessing, amending and distributing within the maintenance organization all necessary airworthiness data from the type certificate holder or type design organization.

**Note:** - refer SLCAIS 056, 145.A.70 "Maintenance Organization Exposition" & SLCAIS 080, M.A. 401 "Maintenance Data"

- **7.2.2** The maintenance organization shall ensure that the procedures manual is amended as necessary to keep the information contained therein up to date.
- **7.2.3** Copies of all amendments to the procedures manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.

### 7.3 Safety Management

- **7.3.1** The mode and manner to achieve and maintain the acceptable level of safety in the operator of aircraft in Sri Lanka are specified in Sri Lanka's Safety Programme developed by the DGCA.
- **7.3.2** The acceptable level of safety to be achieved is specified in Sri Lanka's Safety Programme.
- **7.3.3** Safety Management Systems established by a Maintenance organization should as a minimum, conform to Sri Lanka's Safety Programme and;
  - a. identifies safety hazards;
  - b. ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

- c. provides for continuous monitoring and regular assessment of the safety level achieved; and
- d. aims to make continuous improvement to the overall level of safety.
- **7.3.4** A safety management system shall clearly define lines of safety accountability throughout maintenance organization, including a direct accountability for safety on the part of senior management.

*Note.* – refer SLCAIS 056 "General Requirements to be satisfied by Aircraft Maintenance Organizations for Approval"

## 7.4 Maintenance Procedures and Quality Assurance System

- **7.4.1** The Maintenance organization shall establish procedures, acceptable to the DGCA granting the approval, which ensure good maintenance practices and compliance with all relevant requirements this implementing standard.
- **7.4.2** The maintenance organization shall ensure compliance with paragraph 7.4.1 by both establishing an independent quality assurance system to monitor compliance with and adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance is properly performed.

Note. – refer SLCAIS 080, M.A. 712 "Application" & SLCAIS 056, 145.A.65 "Safety and Quality Policy, Maintenance Procedures and Quality System"

#### 7.5 Facilities

- **7.5.1** The facilities and working environment shall be appropriate for the task to be performed.
- **7.5.2** The maintenance organization shall have the necessary technical data, equipment, tools and material to perform the work for which it is approved.
- **7.5.3** Storage facilities shall be provided for parts, equipment, tools and material. Storage conditions shall be such as to provide security and prevent deterioration of and damage to stored items.

**Note**. – refer SLCAIS 056 "General Requirements to be satisfied by Aircraft Maintenance Organizations for Approval"

### 7.6 Personnel

- **7.6.1** The maintenance organization shall nominate a person or group of persons whose responsibilities include ensuring that the maintenance organization is in compliance with the requirements for an approved maintenance organization as specified in section 7 of this IS.
- **7.6.2** The maintenance organization shall employ the necessary personnel to plan, perform, supervise, inspect and release the work to be performed.
- 7.6.3 The competence of maintenance personnel shall be established in accordance with a procedure and to a level acceptable to the DGCA. The person signing a maintenance release shall be qualified in accordance with Implementing Standards IS 66 "Personnel Licensing Requirement Aircraft Maintenance License".

**7.6.4** The maintenance organization shall ensure that all maintenance personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities. The training Programme established by the maintenance organization shall include training in knowledge and skills related to human performance, including co-ordination with other maintenance personnel and flight crew.

**Note.**—Operators are advised that Guidance material to design training programmes to develop knowledge and skills in human performance can be found in the Human Factors Training Manual (ICAO Doc 9683).

**Note**. – refer SLCAIS 080 "Requirements for Continuing Airworthiness" & SLCAIS 056 "General Requirements to be satisfied by Aircraft Maintenance Organizations for Approval"

#### 7.7 Records

- **7.7.1** The maintenance organization shall retain detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.
- **7.7.2** The records required by paragraph 7.7.1 above shall be kept for a minimum period of thirty six (36) months after signing of the maintenance release.

Note. – refer SLCAIS 056, 145.A.55 "Maintenance Records"

#### 8. Maintenance Release

**8.1** A maintenance release shall be completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedures described in the maintenance Organization's procedures manual.

Note. - refer SLCAIS 080, M.A. 612 "Aircraft Certificate of Release to Service"

- **8.2** maintenance release shall contain a certification including:
  - a. Basic details of the maintenance carried out including detailed reference of the approved data used;
  - b. Date such maintenance was completed;
  - c. When applicable, the identity of the approved maintenance organization; and
  - d. The identity of the person or persons signing the release.

Note. - refer SLCAIS 080, M.A. 801 "Aircraft Certificate of Release to Service-CRS"

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