

**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 9- Aeroplane Flight Crew**

**Reference No. :** IS-6-(i)-9

**SLCAIS:** 018

**Date:** 01<sup>st</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, I, being the Director General of Civil Aviation do hereby issue the Implementing Standards on Compliance to **Annex 6 - Part (I) - Chapter 9–Aeroplane Flight Crew** as mentioned in the Attachment hereto (Ref: IS-6-(i)-1) which set out the intended meaning of the terms used in Annex 6 and all other documents relating to aircraft operations.

This document supersedes the Implementing Standards IS 058 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.

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Enclosure: Attachment No. IS-6-(i)-9-Att-01

## Implementing Standards

### **Title: Compliance to Annex-6-Part 1 – Chapter 9- Aeroplane Flight Crew**

#### **GENERAL:**

- i. Requirements contained in this document are based on the amendment 42 of the 10<sup>th</sup> Edition of ICAO Annex 6 – “Operation of Aircraft” Chapter 9 – Aeroplane Flight Crew.
- 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 Standards IS 058 and shall be treated as null and void.
- v. 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.

#### **Requirements for Aircraft Flight Crew**

### **1. COMPOSITION OF THE FLIGHT CREW**

- 1.1** The number and composition of the flight crew shall not be less than that specified in the operations manual. The flight crews shall include flight crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness, when necessitated by considerations related to the type of aeroplane used, the type of operation involved and the duration of flight between points where flight crews are changed.
- 1.2** **Radio operator;** The flight crew shall include at least one member who holds a valid licence, issued or rendered valid by the DGCA, authorizing operation of the type of radio transmitting equipment to be used.
- 1.3** **Flight engineer;** When a separate flight engineer’s station is incorporated in the design of an aeroplane, the flight crew shall include at least one flight engineer especially assigned to that station, unless the duties associated with that station can be satisfactorily performed by another flight crew member, holding a flight engineer licence, without interference with regular duties.
- 1.4** **Flight navigator;** The flight crew shall include at least one member who holds a flight navigator licence in all operations where, as determined by the DGCA, navigation necessary for the safe conduct of the flight cannot be adequately accomplished by the pilots from the pilot station.

## **2. FLIGHT CREW MEMBER EMERGENCY DUTIES**

The operator shall, for each type of aeroplane, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation requiring emergency evacuation. Annual training in accomplishing these functions shall be contained in the operator's training programme and shall include instruction in the use of all emergency and life-saving equipment required to be carried, and drills in the emergency evacuation of the aeroplane.

## **3. FLIGHT CREW MEMBER TRAINING PROGRAMMES**

**3.1** The operator shall establish and maintain a ground and flight training programme (refer SLACP 4500), approved by the DGCA, which ensures that all flight crew members are adequately trained to perform their assigned duties. The training programme shall:

- a) Include ground and flight training facilities and properly qualified instructors as determined by the DGCA; for guidance please refer to IS 090 on Approval of Instructors.
- b) Include Crew Resource Management Training as per guidance provided in General Directive GD 001.
- c) Include Mode Awareness and Energy State Management Aspects of Flight Deck Automation as per General Directive GD002.
- d) Include Flight Crew Initial and Recurrent Approach and Landing Accidents (ALA) and CFIT Prevention Training as per guidance provided in General Directive GD 004.
- e) Include Training on Instrument Approach Procedures Using Continuous Descent Final Approach Techniques as per guidance provided in General Directive GD 005.
- f) Consist of ground and flight training in the type(s) of aeroplane on which the flight crew member serves;
- g) Include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by engine, airframe or systems malfunctions, fire or other abnormalities;
- h) Include upset prevention and recovery training;
- i) Include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, charting, and human performance including threat and error management and in the transport of dangerous goods;
- j) ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures; and
- k) Be given on a recurrent basis, as determined by the DGCA and shall include an assessment of competence.

**Note 1.** — *Paragraph 2.5 of IS 013 prohibits the in-flight simulation of emergency or abnormal situations when passengers or cargo are being carried.*

**Note 2.** — *Flight training may, to the extent deemed appropriate by the DGCA, be given in flight simulation training devices approved by the DGCA for that purpose.*

**Note 3.** — *The scope of the recurrent training required by 2 and 3 of this IS may be varied and need not be as extensive as the initial training given in a particular type of aeroplane.*

**Note 4.** — *The use of correspondence courses and written examinations as well as other means may, to the extent deemed feasible by the DGCA, be utilized in meeting the requirements for periodic ground training.*

**Note 5.** — *For more information on dangerous goods operational requirements, see Implementing Standards IS 009.*

**Note 6.** — *Guidance material to design training programmes to develop knowledge and skills in human performance can be found in the Human Factors Training Manual (Doc 9683).*

**Note 7.** — *Information for pilots and flight operations personnel on flight procedure parameters and operational procedures is contained in PANS-OPS (Doc 8168), Volume I. Criteria for the construction of visual and instrument flight procedures are contained in PANS-OPS (Doc 8168), Volume II. Obstacle clearance criteria and procedures used in certain States may differ from PANS-OPS, and knowledge of these differences is important for safety reasons.*

**Note 8.** — *Guidance material to design flight crew training programmes can be found in the Manual of Evidence-based Training (Doc 9995).*

**Note 9.** — *Guidance material on the different means used to assess competence can be found in the Attachment to Chapter 2 of the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).*

**Note 10.** — *Procedures for upset prevention and recovery training in a flight simulation training device are contained in the Procedures for Air Navigation Services — Training (PANS-TRG, Doc 9868).*

**Note 11.** — *Guidance on upset prevention and recovery training in a flight simulation training device is contained in the Manual on Aeroplane Upset Prevention and Recovery Training (Doc 10011).*

**3.2** The requirement for recurrent flight training in a particular type of aeroplane shall be considered fulfilled by:

- a) The use, to the extent deemed feasible by the DGCA, of flight simulation training devices approved by the DGCA for that purpose; or
- b) The completion within the appropriate period of the proficiency check required by 4.4 in this IS that type of aeroplane.

## **4. QUALIFICATIONS**

*Note.* — See the *Manual of Procedures for Establishment and Management of a Perpetual Licensing Procedures Manual (SLCAP 3100)* for guidance of a general nature on cross-crew qualification, mixed-fleet flying and cross-credit.

#### **4.1 Recent experience — pilot-in-command and co-pilot**

**4.1.1** The operator shall not assign a pilot-in-command or a co-pilot to operate at the flight controls of a type or variant of a type of aeroplane during take-off and landing unless that pilot has operated the flight controls during at least three take-offs and landings within the preceding 90 days on the same type of aeroplane or in a flight simulator approved for the purpose.

**4.1.2** When a pilot-in-command or a co-pilot is flying several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the DGCA shall decide under which conditions the requirements of 4.1.1 of this IS for each variant or each type of aeroplane can be combined.

#### **4.2 Recent experience — cruise relief pilot**

**4.2.1** The operator shall not assign a pilot to act in the capacity of cruise relief pilot in a type or variant of a type of aeroplane unless, within the preceding 90 days that pilot has either:

- a) Operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or
- b) Carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practiced approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.

**4.2.2** When a cruise relief pilot is flying several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the DGCA shall decide under which conditions the requirements of 4.2.1 of this IS for each variant or each type of aeroplane can be combined.

#### **4.3 Pilot-in-command area, route and aerodrome qualification**

**4.3.1** The operator shall not utilize a pilot as pilot-in-command of an aeroplane on a route or route segment for which that pilot is not currently qualified until such pilot has complied with 4.3.2 and 4.3.3 of this IS.

**4.3.2** Each such pilot shall demonstrate to the operator an adequate knowledge of:

- a) The route to be flown, and the aerodromes which are to be used. This shall include knowledge of:
  - 1) The terrain and minimum safe altitudes;
  - 2) The seasonal meteorological conditions;
  - 3) The meteorological, communication and air traffic facilities, services and procedures;

- 4) The search and rescue procedures; and
  - 5) The navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place; and
- b) Procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima.

*Note.*— *That portion of the demonstration relating to arrival, departure, holding and instrument approach procedures may be accomplished in an appropriate training device which is adequate for this purpose.*

**4.3.3** A pilot-in-command shall have made an actual approach into each aerodrome of landing on the route, accompanied by a pilot who is qualified for the aerodrome, as a member of the flight crew or as an observer on the flight deck, unless:

- a) The approach to the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, and a margin to be approved by the DGCA is added to the normal operating minima, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions; or
- b) The descent from the initial approach altitude can be made by day in visual meteorological conditions; or
- c) The operator qualifies the pilot-in-command to land at the aerodrome concerned by means of an adequate pictorial presentation; or
- d) The aerodrome concerned is adjacent to another aerodrome at which the pilot-in-command is currently qualified to land.

**4.3.4** The operator shall maintain a record, sufficient to satisfy the DGCA of the qualification of the pilot and of the manner in which such qualification has been achieved.

**4.3.5** The operator shall not continue to utilize a pilot as a pilot-in-command on a route or within an area specified by the operator and approved by the DGCA unless, within the preceding 12 months, that pilot has made at least one trip as a pilot member of the flight crew, or as a check pilot, or as an observer in the flight crew compartment:

- a) Within that specified area; and
- b) If appropriate, on any route where procedures associated with that route or with any aerodromes intended to be used for take-off or landing require the application of special skills or knowledge.

**4.3.6** In the event that more than 12 months elapse in which a pilot-in-command has not made such a trip on a route in close proximity and over similar terrain, within such a specified area, route or aerodrome, and has not practiced such procedures in a training device which is adequate for this purpose, prior to again serving as a pilot-in-command within that area or on that route, that pilot must requalify in accordance with 4.3.2 and 4.3.3 of this IS.

#### 4.4 Pilot proficiency checks

**4.4.1** The operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type or variant of a type of aeroplane. Where the operation may be conducted under instrument flight rules, the operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the DGCA of the Operator. Such checks shall be performed twice within any period of one year. Any two such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.

*Note 1. — Flight simulation training devices approved by the DGCA may be used for those parts of the checks for which they are specifically approved.*

*Note 2. — See the Manual of Criteria for the Qualification of Flight Simulation Training Devices (Doc 9625).*

**4.4.2** When the operator schedules flight crew on several variants of the same type of aeroplane or different types of aeroplanes with similar characteristics in terms of operating procedures, systems and handling, the DGCA shall decide under which conditions the requirements of 4.4.1 of this IS for each variant or each type of aeroplane can be combined.

#### 4.5 Single pilot operations under the instrument flight rules (IFR) or at night

**4.5.1** The DGCA shall prescribe requirements of experience, recency and training applicable to single pilot operations intended to be carried out under the IFR or at night.

**4.5.2** The pilot-in-command should:

- a) For operations under the IFR or at night, have accumulated at least 50 hours flight time on the class of aeroplane, of which at least 10 hours shall be as pilot-in-command;
- b) For operations under the IFR, have accumulated at least 25 hours flight time under the IFR on the class of aeroplane, which may form part of the 50 hours flight time in sub-paragraph a);
- c) For operations at night, have accumulated at least 15 hours flight time at night, which may form part of the 50 hours flight time in sub-paragraph a);
- d) For operations under the IFR, have acquired recent experience as a pilot engaged in a single pilot operation under the IFR of:
  - 1) At least five IFR flights, including three instrument approaches carried out during the preceding 90 days on the class of aeroplane in the single pilot role; or
  - 2) An IFR instrument approach check carried out on such an aeroplane during the preceding 90 days;
- e) For operations at night, have made at least three take-offs and landings at night on the class of aeroplane in the single pilot role in the preceding 90 days; and

- f) Have successfully completed training programmes that include, in addition to the requirements of 3 of this IS, passenger briefing with respect to emergency evacuation, autopilot management, and the use of simplified in-flight documentation.

**4.5.3** The initial and recurrent flight training and proficiency checks indicated in 3.1 and 4.4 of this IS shall be performed by the pilot-in-command in the single pilot role on the class of aeroplane in an environment representative of the operation.

## **5. FLIGHT CREW EQUIPMENT**

A flight crew member assessed as fit to exercise the privileges of a licence, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.