

- (a) when and how oxygen equipment is to be used, if the carriage of oxygen is required;
  - (b) the location and use of life jackets or equivalent individual flotation devices, where the carriage thereof is required;
  - (c) the location and method of opening emergency exits;
  - (d) when seat belts are to be fastened;
  - (e) when smoking is prohibited; and
  - (f) when portable electronic devices may be used.
- (4) The pilot-in-command of an aircraft shall -
- (a) ensure that the pre-flight inspection has been carried out, and that the checklists, and where applicable, the flight deck procedures and other instructions regarding the operation of the aircraft, the limitations contained in the aircraft flight manual referred to in regulation 91.03.2, or equivalent certification document, are fully complied with at the appropriate times during a flight;
  - (b) decide whether or not to accept an aircraft with unserviceabilities allowed by the CDL or MEL, where applicable;
  - (c) before take-off, ensure that the passengers are briefed on the location and general manner of use of the relevant emergency equipment carried for collective use and, when an emergency arises, shall instruct the passengers to take such emergency action as may be appropriate;
  - (d) ensure that during take-off and landing and whenever, by reason of turbulence or any emergency occurring during a flight, the precaution is considered necessary, all persons on board the aircraft are secured in their seats by means of the seat belts or shoulder harnesses provided;
  - (e) when re-planning, whilst in flight, to proceed along a route or to a destination other than the route or destination originally planned, shall amend the operational flight plan, if such a plan was required in terms of regulation 91.02.7(1)(f);
  - (f) report any accident or incident involving the aircraft in accordance with Part 12;
  - (g) report any dangerous goods accident or incident involving the aircraft in accordance with Part 92;
  - (h) if the aircraft is endangered in flight by a near collision with any other aircraft or object, faulty air traffic procedure or lack of compliance with applicable procedures by an air traffic service unit or a flight crew member or a failure of air traffic service facilities, submit an air traffic service incident report in accordance with regulation 12.02.2;
  - (i) record any technical defect and the exceeding of any technical limitation which occurred while he or she was responsible for the flight, in the flight folio; and
  - (j) if a potentially hazardous condition such as bird accumulation, an irregularity in a ground or navigation facility, meteorological phenomena, a volcanic ash cloud or a greater than normal radiation level is observed during flight, notify an air traffic service unit as soon as possible.
- (5) The pilot-in-command of the aircraft shall ensure that -
- (a) breathing oxygen is available to flight crew members and passengers if flights in a non-pressurised aircraft are contemplated above 10 000 feet up to 12 000 feet in excess of 60 minutes, or above 12 000 feet; and
  - (b) breathing oxygen is carried in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of faculties of flight crew members, or harmfully affect passengers.
- (6) The pilot-in-command of the aircraft shall not -
- (a) require a flight crew member to perform any duties during a critical phase of the flight, except those duties required for the safe operation of the aircraft;
  - (b) permit any activity during a critical phase of the flight which could distract any flight crew member from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties; and
  - (c) continue a flight beyond the nearest suitable aerodrome in the event of a flight crew member becoming unable to perform any essential duties as a result of fatigue, sickness or lack of oxygen.
- (7) The pilot-in-command of an aircraft, or in his or her absence, the owner or operator thereof, shall report any act of unlawful interference with the operation of the aircraft, or the authority of the pilot-in-command -
- (a) if the act of unlawful interference occurs within the Republic, to the Commissioner; or
  - (b) if the act of unlawful interference occurs within or over the territory of a foreign State, to the appropriate authority of the State and the Commissioner.

### SUBPART 3

#### DOCUMENTATION AND RECORDS

##### Documents to be carried on board

**91.03.1** The owner or operator of an aircraft shall ensure that the following documents or certified true copies thereof, are carried on board the aircraft on each individual flight:

- (a) If the aircraft is engaged in an international flight -
  - (i) the certificate of registration;
  - (ii) the certificate of airworthiness;
  - (iii) the appropriate licence of each flight crew member;
  - (iv) the journey logbook or general declaration;
  - (v) the aircraft radio station licence;
  - (vi) if passengers are carried, the passenger manifest, unless the information is included in the general declaration referred to in subparagraph (iv);
  - (vii) if cargo is carried, a manifest and detailed declaration of the cargo;
  - (viii) the certificate of release to service;

- (ix) the navigation log when a navigator is carried;
- (x) the aircraft flight manual referred to in regulation 91.03.2, or an equivalent document;
- (xi) the mass and balance report;
- (xii) the flight folio;
- (xiii) the MEL, if applicable;
- (xiv) the noise certificate, if such certificate has been issued for the type of aircraft; and
- (xv) a list of visual signals for use by intercepting and intercepted aircraft;
- (b) if the aircraft is engaged in a domestic flight -
  - (i) the certificate of registration;
  - (ii) the certificate of airworthiness;
  - (iii) the appropriate licence of each flight crew member;
  - (iv) the aircraft radio station licence;
  - (v) the certificate of release to service;
  - (vi) the aircraft flight manual referred to in regulation 91.03.2 or an equivalent document;
  - (vii) the mass and balance report;
  - (viii) the flight folio;
  - (ix) the MEL, if applicable;
  - (x) the noise certificate, if such certificate has been issued for the type of aircraft; and
  - (xi) the list of visual signals for use by intercepting and intercepted aircraft.

### **Aircraft flight manual**

#### **91.03.2**

- (1) The owner or operator of an aircraft shall keep a current approved aircraft flight manual for each aircraft of which he or she is the owner or operator.
- (2) The flight crew members of the aircraft shall, on each flight, operate such aircraft in accordance with the aircraft flight manual, unless an unforeseen emergency dictates otherwise.

### **Aircraft checklists**

**91.03.3** The owner or operator of an aircraft shall, where applicable, establish and make available to the flight crew and other personnel in his or her employ needing the information, a checklist system for the aircraft, to be used by such flight crew and other personnel for all phases of the operation under normal, abnormal and emergency conditions.

### **Air traffic service flight plan**

#### **91.03.4**

- (1) The owner or operator of an aircraft shall ensure that an air traffic service flight plan is completed if required in terms of sub-regulation (4).
- (2) The items to be contained in the air traffic service flight plan referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS-OPS 91.
- (3) The air traffic service flight plan shall be filed with the appropriate air traffic service unit and such unit shall be responsible for transmitting such air traffic service flight plan to all air traffic service units concerned with the flight.
- (4) The air traffic service flight plan shall be filed in respect of -
  - (a) all flights to be conducted in controlled or advisory airspace: Provided that this requirement shall not apply in respect of -
    - (i) a local flight;
    - (ii) a flight crossing an airway or advisory routes at right angles; or
    - (iii) a VFR flight entering or departing from an aerodrome traffic zone or control zone, from or to an unmanned aerodrome and where no other controlled or advisory airspace will be entered during the flight;
  - (b) an international flight;
  - (c) all flights undertaken in terms of a Class I or Class II licence issued in terms of the Air Services Licensing Act, 1990, or the International Air Services Act, 1993; and
  - (d) a flight for which alerting action is required.
- (5) An air traffic control unit may instruct a flight for which an air traffic service flight plan is required in terms of sub-regulation (4) and for which an air traffic service flight plan has not been filed, to clear or to remain clear of controlled airspace, and not to cross the border of the Republic or to enter its airspace until such time as the required air traffic service flight plan has been filed.
- (6) Unless otherwise authorised by the responsible air traffic service unit, an air traffic service flight plan for a flight to be conducted in controlled or advisory airspace, shall be filed at least 30 minutes before departure or, if filed during flight while outside controlled or advisory airspace for a flight to be conducted in such airspace, it shall be filed with the responsible air traffic service unit at least 10 minutes before the aircraft is estimated to reach the intended point of entry into the controlled or advisory airspace.
- (7) The pilot-in-command of an aircraft shall ensure that all changes which become applicable to an air traffic service flight plan before departure or in flight, are reported, as soon as practicable, to the responsible air traffic service unit.
- (8) If an air traffic service flight plan has been filed with an air traffic service unit prior to departure, and is not activated with an air traffic service unit within one hour of original estimated time of departure or amended estimated time of departure, the air traffic service flight plan shall be regarded as cancelled and a new air traffic service flight plan shall be filed.
- (9) Where an air traffic service unit is not in operation at the aerodrome of intended landing a report shall be submitted to an air traffic service unit, by the quickest means of communication available, immediately before or after landing, in respect of a flight for which an air traffic service flight plan was submitted and not as yet closed.
- (10) Subject to the provisions of sub-regulation (11), the pilot-in-command shall ensure that the aircraft adheres to the

current air traffic service flight plan filed for a controlled flight, unless a request for a change has been made and accepted by the air traffic control unit responsible for the controlled airspace in which the aircraft is operating, or unless an emergency situation arises which necessitates immediate action, in which event the responsible air traffic control unit shall, as soon as circumstances permit, be notified of the action taken and that such action was taken under emergency authority.

- (11) In the event of a controlled flight inadvertently deviating from its current air traffic service flight plan, the following action shall be taken:
- (a) If the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable;
  - (b) if the average true airspeed at cruising level between reporting points varies, or is expected to vary, from that given in an air traffic service flight plan by approximately five per cent of the true airspeed, the responsible air traffic service unit shall be so informed;
  - (c) if the estimated time at the next applicable reporting point, flight information regional boundary, or aerodrome of intended landing, whichever comes first, is found to be in error in excess of three minutes from that notified to the responsible air traffic service unit, a revised estimated time shall be notified to such air traffic service unit as soon as possible; or
  - (d) if the aircraft deviates from its altitude, action shall be taken forthwith to correct the altitude of the aircraft.

#### **Flight folio**

##### **91.03.5**

- (1) The owner or operator of a South African registered aircraft shall ensure that the aircraft carries a flight folio or any other similar document which contains the information as prescribed in Document SA-CATS-OPS 91, at all times.
- (2) The flight folio shall be kept up-to-date and maintained in a legible manner.
- (3) All entries shall be made immediately upon completion of the occurrence to which they refer.
- (4) In the case of maintenance being undertaken on the aircraft, the entry shall be certified by the person taking responsibility for the maintenance performed.
- (5) The owner or operator shall retain the flight folio for a period of five years calculated from the date of the last entry therein.

#### **Fuel and oil record**

##### **91.03.6**

- (1) The owner or operator of an aircraft shall maintain fuel and oil records for each flight undertaken by the aircraft under the control of such owner or operator.
- (2) The pilot-in-command of the aircraft shall enter the fuel and oil records referred to in sub-regulation (1) in the flight folio.

#### **Certificate of release to service**

##### **91.03.7**

- (1) No owner or operator of an aircraft shall operate -
  - (a) a South African registered aircraft without holding a valid certificate of release to service signed by the holder of an appropriately rated aircraft maintenance engineer licence or aircraft maintenance organisation approval; or
  - (b) a foreign aircraft without holding a valid certificate, equivalent to the certificate referred to in paragraph (a), issued by an appropriate authority.
- (2) The owner or operator shall -
  - (a) ensure that one copy of the certificate of release to service or equivalent certificate is carried on board the aircraft to which it relates and, in the case of a South African registered aircraft, a second copy shall be filed at the normal station of the aircraft; and
  - (b) retain the certificate of release to service for a period of 12 months calculated from the date of issue of such certificate of release to service.

#### **Flight recorder records**

##### **91.03.8**

- (1) The owner or operator of an aircraft on which a flight recorder is carried, shall -
  - (a) in the case of an accident or incident involving such aircraft, preserve the original recording, as retained by the flight recorder, for a period of not less than 60 days calculated from the date of the accident or incident, or until permission for disposal of such recording has been given by the investigator-in-charge or an appropriate authority, whichever is the latter date;
  - (b) when the Commissioner so directs, preserve the original recording, as retained by the flight recorder, for a period of not less than 60 days calculated from the date of such direction or until permission for disposal of such recording has been given by the Commissioner.
- (2) If an aircraft is required under this Part to be fitted with a flight data recorder, the owner or operator of the aircraft shall -
  - (a) save the recording for the period of operating time as required by sub-regulation (1)(a) and (b): Provided that for the purpose of testing and maintaining a flight data recorder one hour of the oldest recorded material at the time of testing may be erased;
  - (b) keep a recording of at least one representative flight made within the preceding 12 months which includes a take-off, climb, cruise, descent, approach and landing, together with a means of identifying the recording with the flight to which it relates; and
  - (c) keep a document which represents the information necessary to retrieve and convert the stored data into

engineering units.

- (3) The owner or operator of an aircraft on which a flight recorder is carried shall, within a reasonable time after being requested to do so by the Commissioner or an appropriate authority, produce any recording made by such flight recorder which is available or has been preserved.
- (4) A cockpit voice recorder recording may be used for purposes other than for the investigation of an accident or incident only with the consent of all the flight crew members concerned.
- (5) The flight data recorder recordings may be used for purposes other than the investigation of an accident or incident which is subject to mandatory reporting, only when such recordings are -
  - (a) used by the owner or operator for airworthiness or maintenance purposes only;
  - (b) de-identified; or
  - (c) disclosed under secure procedures.

## **Logbooks**

### **91.03.9**

- (1) The following logbooks shall be kept in respect of South African registered aircraft and in respect of other specified equipment for the purpose of recording therein the maintenance history of the equipment to which each relates :
  - (a) an aircraft logbook for each aircraft;
  - (b) an engine logbook for each aircraft engine;
  - (c) a propeller logbook for each propeller;
- (2) The provision of sub-regulation (1) shall not apply to aircraft which do not qualify for the issue of a certificate of airworthiness.
- (3) Logbooks to be kept in terms of sub-regulation (1) shall conform to such format as the Commissioner may from time to time prescribe in an AIC.
- (4) Logbooks should preferably be kept at the aircraft's base of operation. Details in respect of maintenance carried out while away from base shall be transferred to the appropriate logbook or logbooks within 48 hours after the return of the aircraft to its base of operation or entered within 48 hours on completion of any maintenance performed on the aircraft or installed equipment at a base other than its base of operation.
- (5) All logbooks to be kept and maintained in terms of the preceding sub-regulations shall on demand be made available at all times for inspection by an authorised officer.
- (6) The logbooks required to be kept in accordance with this Part shall be preserved in a safe place at all times and for a period of 6 (six) months after the date of destruction of the airframe, engine or propeller for which they were kept.
- (7) Logbooks shall not be carried in the aircraft to which they relate unless the aircraft is flown to a place where the logbooks are required for compliance with maintenance to the aircraft. Where a logbook is carried on board an aircraft, a suitable record of the last inspection performed shall be maintained at the base of operation of the aircraft.
- (8) Entries in the logbooks required to be kept in accordance with this Part shall be made and signed by the holder of an appropriate licence or by a person approved by the Commissioner, except that matters that could not have come to the notice of the holder of an appropriate licence or an approved person, shall be entered and signed by the pilot-in-command.
- (9) Any record kept for the purpose of compiling a logbook or any other technical data relating to the airworthiness of an aircraft or component shall be produced when called for in the event of an inspection or investigation.
- (10) All entries made in logbooks shall furnish the information and particulars provided for in the relevant logbook.
- (11) When repairs to an aircraft, aircraft engine or component or fixed or removable equipment have been required in consequence either of damage caused by a forced landing or of defects which have occasioned a forced landing or any other incident, the entry or entries made in the relevant logbook or books in respect of such repairs shall state that they have been so required and shall identify the forced landing or incident in question.
- (12) The logbooks referred to in this Part shall be kept up to date and maintained in ink in a legible manner and reasonable conditions and in accordance with the "Instructions for use" in the relevant logbook.
- (13) In the event that required maintenance records have been lost or destroyed, alternative proof should be provided that the tasks in question have been performed.

*[Regulation 91.03.9 inserted by the Thirteenth Amendment of the CAR, 1997]*

## **SUBPART 4**

### **INSTRUMENTS AND EQUIPMENT**

#### **Use of instruments and equipment by pilot**

##### **91.04.1**

- (1) Instruments on an aircraft which are used by a pilot shall be so arranged in such a manner that the pilot can see their indications readily from his or her station, with the minimum practicable deviation from the position and line of vision which he or she normally assumes when looking forward along the flight path.
- (2) If a single instrument or item of equipment in an aircraft is required to be operated by more than one pilot, such single instrument or item of equipment shall be installed in such a manner that it can be readily seen and operated from each pilot station.
- (3) An aircraft shall be equipped with means for indicating the adequacy of the power being supplied to the required flight instruments.

#### **Circuit protection devices**

##### **91.04.2**

- (1) No owner or operator of an aircraft in which fuses are used, shall operate the aircraft unless there are spare fuses available for use in flight equal to at least ten per cent or three, whichever is the greater, of the number of fuses of