
GOVERNMENT NOTICE

DEPARTMENT OF TRANSPORT

No. R. 807

4 August 2006

AVIATION ACT, 1962 (ACT NO 74 of 1962)

TWENTY-THIRD AMENDMENT TO THE CIVIL AVIATION REGULATIONS, 1997

The Minister of Transport has under section 22(1) of the Aviation Act, 1962 (Act No 74 of 1962) made the regulations in the Schedule hereto.

SCHEDULE

Definition

1. In these regulations unless the context otherwise indicates “the Regulations” means the Civil Aviation Regulations, 1997, published by Government Notice No R.1219 of 26 September 1997 and R.1255 of 17 October 1997, as amended by Government Notice No R. 1735 of 24 December 1997, Government Notice No R. 1041 of 14 August 1998, Government Notice No R. 1148 of 18 September 1998, Government Notice No R. 1664 of 14 December 1998, Government Notice No R. 1701 of 31 December 1998, Government Notice No R.639 of 21 May 1999, Government Notice No R. 170 of 17 February 2000, Government Notice No R. 171 of 18 February 2000, Government Notice No R. 558 of 22 June 2001, Government Notice No R. 559 of 22 June 2001, Government Notice No R. 559 of 30 August 2002, Government Notice No R. 1367 of 15 November 2002, Government Notice No R. 1368 of 15 November 2002, Government Notice No 1369 of 15 November 2002, Government Notice No R. 1370 of 15 November 2002, Government Notice No R. 1371 of 15 November 2002, Government Notice No R. 1372 of 15 November 2002, Government Notice No R. 434 of 28 March 2003, Government Gazette No 435 of 28 March 2003 Government Gazette No R.1375 of 1 October 2003 and Government Gazette No 1340 of 31 March 2004.

Amendment of regulation 1.00.1 of Part 1 of the Regulations

2. Regulation 1.00.1 of the Regulations is herewith amended by-
 - (a) the insertion of the following definition before the definition of “accelerate-stop distance available”:

”ab initio”, when referring to flight training, means the practical training required towards the first issue of a recreational or private pilot licence, issued in terms of Part 61 or Part 62 of these regulations, or for the endorsement of such a licence with an additional category of aircraft, and for the purpose of regulation 91.02.3 excludes cross-country flight training;”

- (b) the substitution for the definition of “amateur-built aircraft” of the following definition :

”**amateur-built aircraft**’ means an aircraft built in terms of the provisions of Part 24, and for the purpose of these Regulations, include any of its components;”

- (c) the substitution for the definition of “approved” of the following definition:

”**approved**’, unless used with reference to another person, means approved in writing by the Commissioner, or in respect of Parts 24, 94 and 96, by the Commissioner or the organization approved for the purpose in terms of Part 149, as the case may be;”

- (d) the insertion of the following definitions after the definition of “approved”:

(i) **“approved maintenance schedule**’ means a document compiled by an owner or operator in accordance with the provisions of these Regulations, and approved by the Commissioner in terms of regulation 43.02.1 of Part 43, that prescribes in detail the inspections that need to be carried out in respect of an aircraft, its components, installed systems and equipment, and the intervals between such inspections;” and

(ii) **“approved person**’ means a natural person who has been authorised in terms of Part 66 by the Commissioner or the organization approved for the purpose in terms of Part 149, as the case may be, to carry out maintenance on a non-type certificated aircraft in compliance with the applicable aircraft maintenance schedule, and includes the owner of an amateur-built or production-built aircraft that has been built by such owner in accordance with the provisions of Part 24;”.

- (e) the insertion of the following definition after the definition of “cabin crew member”:

“Captive balloon’ means a balloon which is moored to the surface or to a ship, vehicle or construction on the surface;”;

- (f) the insertion of the following definition after the definition of “ceiling”:

”**certificate of airworthiness**’ means the certificate of airworthiness referred to in Article 31 of the Convention, issued in terms of Subpart 8 of Part 21 of these Regulations, and includes an authority to fly issued in terms of Subpart 2 of Part 24;”;

- (g) the substitution for the definition of “glider” of the following definition:

“**glider**’ means a heavier-than-air aircraft, other than a hang-glider, that is supported in flight by the dynamic reaction of the air against its fixed, lifting surfaces, and whereof free flight does not depend on an engine; and for the purposes of these Regulations includes a power-assisted glider and a touring glider;”;

- (h) the insertion of the following definition after the definition of “ground visibility“:

“**gyroglider**’ means a non-power-driven heavier-than-air aircraft, supported in flight by the reactions of the air on one or more rotors which rotates freely on substantially vertical axes;”;

- (i) the substitution for the definition of “gyroplane“ of the following definition:

“**gyroplane**’ means a power-driven heavier-than-air aircraft, supported in flight by the reactions of the air on one or more rotors which rotates freely on substantially vertical axes;”;

- (j) the substitution for the definition of “hang glider” of the following definition:

“**hangglider**’ means the a non-power-driven heavier-than-air aircraft capable of being carried, foot launched, and landed solely by the energy and use of the pilot’s legs, having –

- (a) a rigid primary structure with pilot weight shift as the primary method of control; or
- (b) a rigid primary structure with movable aerodynamic surfaces as the primary method of control in at least two axes, and for the purposes of Parts 24, 94 and 96 includes a powered hang glider;”;

- (k) the insertion of the following definition after the definition of “maintenance“:

“**maintenance control manual**’ means a document, compiled by an owner or operator in accordance with the provisions of these Regulations, approved by the Commissioner in terms of regulation 43.02.3 of the Regulations, that defines the organization and procedures established for ensuring the sustained airworthiness of the aircraft to which it applies, its components, installed systems and equipment;”;

- (l) the insertion of the following definition after the definition of “major repair“:

“**mandatory periodic inspection**’ means an inspection prescribed in regulation 43.02.8 of Part 43;”

- (m) the substitution for the definition of “micro-light aeroplane“ of the following definition:

“**micro-light aeroplane**’ means an aeroplane of which the minimum flying speed and the maximum take-off mass have been restricted for classification purposes. The values of these restrictions are defined in Document SA-CATS-NTCA;”;

- (n) the substitution for the definition of “paraglider” of the following definition:

“**paraglider**’ means a non-power-driven, heavier-than-air aircraft without a rigid primary structure, comprising a flexible drag, or drag and ram-air type lift surface, from which the pilot and passengers are suspended by shroud lines, which is foot-launched, and of which the descent is partly controlled by the pilot by means of two steering lines, and which for the purposes of Parts 24, 94 and 96 includes a paratrike and a powered paraglider;”;

- (o) the insertion of the following definition after the definition of “paraglider”:

“**paratrike**’ means a paraglider with a large ram-air type lift surface and fixed undercarriage;”;

- (p) the insertion of the following definition after the definition of “pilot-in-command” :

“**power-assisted glider**’ means a glider with a maximum all-up mass of not more than 850 kg, fitted with a retractable engine that is used mainly for the purpose of launch and climb and short periods of free flight;”;

- (q) the insertion of the following definition after the definition of “powered glider”:

‘ **powered hang-glider**’ means a hang-glider, fitted with an engine attached either to the structure or to the pilot, and which also may be fitted with a detachable undercarriage, to support its launch and climb;“;

- (r) the substitution for the definition of “powered paraglider” of the following definition:

“ **powered paraglider**’ means a paraglider, fitted with an engine attached to the pilot to assist in its launch and in short local powered flights, and which may have a fixed or detachable undercarriage;”;

- (s) the insertion of the following definition after the definition of “threshold”:

“ **tiltrotor**’ means a power-driven heavier-than-air aircraft, other than an aeroplane, deriving its lift in flight mainly from aerodynamic reactions –

- (a) on surfaces which remain fixed under given conditions; or
- (b) on more than one power-driven rotors on axis that may be tilted during flight from the vertical to the horizontal and *vice versa*; or
- (c) from a combination thereof;” and

- (t) the insertion of the following definition after the definition of ‘touch down area available’:

“ **'touring glider'** means an aeroplane with a maximum all-up mass of not more than 850 kg, fitted with an engine, and having the characteristics of a glider when the engine is inoperative;”;

Amendment of Regulation 11.03.2 of Part 11 of the Regulations

3. Regulation 11.03.2 of the Regulations is herewith amended by the substitution for paragraph (b) of sub-regulation (4) of the following paragraph:

“(b) Publish the proposed regulation or technical standard, amendment or withdrawal, as agreed upon by the committee following its deliberations referred to in sub-regulation (3), as proposed rule-making by notice in the Gazette if it relates to the regulations, and by notice on the CAA website if it relates to the technical standards.”.

Insertion of regulation 11.03.3A into Part 11 of the Regulations

4. The following regulation is herewith inserted after regulation 11.03.2:

"Rule-making notification subscriber service

- 11.03.3** (1) To facilitate the consultation process, the Commissioner shall make available on the CAA website a rule-making notification subscriber service to which any person may subscribe and unsubscribe at no cost and who shall be notified by e-mail of any proposal to make, amend or withdraw any regulation or technical standard, and of any related matter, including the proposals referred to in regulation 11.03.2(4)(b) above.
- (2) Any technical standard issued shall be published on the CAA website for free downloading, and may be ordered from the CAA in either hard copy or electronic format at the prescribed price.”.

Amendment of Part 13 of the Regulations

5. Part 13 of the Regulations is herewith amended by the substitution for the heading thereof of the following heading:

“ Powers and duties of Authorised Officers, Inspectors, and Authorised Persons”

Amendment of Regulation 21.01.2 of Part 21 of the Regulations

6. Regulation 21.01.2 of the Regulations is herewith amended by-
- (a) the substitution for paragraph (a) of sub-regulation (1) of the following paragraph:

- "(a) gliders, power-assisted gliders, and touring gliders;" and
- (b) the substitution for paragraph (j) of sub-regulation (1) of the following paragraph:

"(j) unmanned aerial vehicles;"

Amendment of regulation 21.06.1 of Part 21 of the Regulations

7. Regulation 21.06.1 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

"Production under type certificate

21.06.1 The manufacturer of a product being manufactured under a type-certificate shall-

- (a) determine that each completed product conforms to the applicable type design and is in a condition for safe operation prior to submitting statements of conformity to the Commissioner;
- (b) unless otherwise authorised by the Commissioner, establish and maintain a production inspection system for products manufactured more than six months after the date on which the type certificate was issued, to ensure that such products conform to the type design, and are in condition for safe operation; and
- (c) upon the establishment of the production inspection system referred to in paragraph (b), submit to the Commissioner a manual that describes such system as well as the procedures for making the determinations referred to in regulation 21.06.2(2).

Amendment of Regulation 21.08.1 of Part 21 of the Regulations

8. Regulation 21.08.1 of the Regulations is herewith amended by the substitution for sub-regulation (3) of the following sub-regulation:

"(3) An aircraft may be issued with a standard category certificate of airworthiness which includes limitations that otherwise would require it to be issued with a restricted category certificate of airworthiness, provided the aircraft-

- (a) can be converted from one configuration to another by removing or adding equipment by simple mechanical means; complies with the requirements prescribed for flight operations in that configuration and the particular operation; and
- (b) after having been operated in terms of Part 137, is inspected for release to service according to the provisions of Part 43, each time the aircraft is restored to a configuration permitting the carriage of passengers in terms of either Part 121, Part 127, Part 135 or Part 138, as the case may be, unless the Commissioner finds this unnecessary for safety in a particular case."

Amendment of Regulation 21.08.2 of Part 21 of the Regulations

9. Regulation 21.08.2 of the Regulations is herewith amended by-
- (a) the deletion of sub-regulation (4) thereof;

Amendment of Regulation 21.08.4 of Part 21 of the Regulations

10. Regulation 21.08.4 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

"Requirements and application for experimental certificate

- 21.08.4 (1)** An experimental certificate for an aircraft may be issued for the purposes of –
- (a) showing compliance with the Regulations with specific reference to the conducting of flight tests and other operations to show compliance with the airworthiness regulations including –
 - (i) flights to show compliance for issuance of a type certificate or
 - (ii) supplemental type certificate;
 - (iii) flights to substantiate major design changes; and
 - (iv) flights to show compliance with the function and reliability requirements of the Regulations; or
 - (b) research and development relating to the testing of new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operating techniques, or new uses for aircraft.
- (2) An experimental certificate for a non-type certificated aircraft is issued as a proving flight authority as prescribed in Part 24 of the Regulations,
- (3) An application for the issue of an experimental certificate or an amendment thereto, other than for a non-type certificated aircraft, shall be made to the Commissioner and shall include --
- (a) a statement specifying the purposes of the test flights;

- (b) sufficient data to identify the aircraft;
 - (c) the estimated time and duration or number of the test flights;
 - (d) details of the area over which the tests will be conducted;
 - (e) proof that the aircraft complies with any design criteria or design changes necessary for the safe operation of the aircraft that the Commissioner may require;
 - (f) flight manuals, maintenance manuals, or such documents relating to the operation of the aircraft that the Commissioner may require, if such manuals or documents already have been developed;
 - (g) except for aircraft converted from a previously type-certificated aircraft without appreciable change in the external configuration or silhouette, three-view drawings or three-dimensional views of the aircraft; and
 - (h) any other information that the Commissioner may require to safeguard the public.
- (4) An application for the issue of a proving flight authority-for a non-type certificated aircraft or an amendment thereto shall be made in accordance with the provisions of Part 24.
- (5) An experimental certificate issued in terms of this Part shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State permission of the responsible aeronautical authority is required.”

Amendment of Regulation 21.08.5 of Part 21 of the Regulations

11. Regulation 21.08.5 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

“Requirements and application for special flight permit

21.08.5 (1) A special flight permit for an aircraft may be issued for the purposes of –

- (a) ferrying an aircraft where the certificate of airworthiness has become invalid due to the aircraft no longer meeting its airworthiness standard to a base where maintenance can be carried out;

- (b) delivering or exporting the aircraft;
 - (c) evacuating the aircraft from areas of impending danger;
 - (d) carrying out a flight or a series of flights while the aircraft does not conform to the appropriate design standards referred to in regulation 21.02.3; or
 - (e) operation of an aircraft at a mass in excess of its maximum certificated take-off mass for flights beyond the normal range over water or over land areas where adequate landing facilities or appropriate fuel is not available. The excess mass that may be authorised under this sub-regulation is limited to the additional fuel, fuel-carrying facilities, and navigation and emergency equipment necessary for the flight.
- (2) A special flight permit for a non-type certificated aircraft is issued as an authority to fly as prescribed in Part 24 of the Regulations.
- (3) An application for the issuing of a special flight permit for an aircraft or an amendment thereto, other than for a non-type certificated aircraft, shall be made to the Commissioner on the form prescribed in Document SA-CATS-AR and be accompanied by a statement containing –
- (a) the purpose of the flight(s);
 - (b) the proposed itinerary;
 - (c) details of any non-compliance with the appropriate airworthiness design standards referred to in regulation 21.02.3;
 - (d) any restriction the applicant considers necessary for the safe operation of the aircraft; and
 - (e) any other information that the Commissioner may require for the purpose of prescribing operating limitations.
- (4) The Commissioner may make, or require the applicant to make appropriate inspections or tests to establish safety aspects.
- (5) The application referred to in sub-regulation (3) shall be accompanied by the appropriate fee as prescribed in Part 187.
- (6) An application for the issue of an authority to fly for a non-type certificated aircraft or an amendment thereto shall be made in accordance with the provisions of Part 24
- (7) A special flight permit issued in terms of this Part shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State permission of the responsible aeronautical authority is required.”

Amendment of Regulation 21.08.8 of Part 21 of the Regulations

12. Regulation 21.08.8 of the Regulations is herewith amended by –

the substitution for the said regulation of the following regulation:

“Special flight permits with continued authorisation

21.08.6 (1) Upon application, the Commissioner may issue a special flight permit with a continued authorisation to –

- (a) the holder of an operating certificate for the purpose of ferrying an aircraft that may not meet applicable airworthiness requirements but is capable of safe flight to a base where maintenance or alterations are performed; or
- (b) the holder of a manufacturing authorisation approval issued in terms of Part 148 for the purpose of --
 - (i) flight testing new production aircraft manufactured by such holder; and
 - (ii) conducting customer demonstration flights in new production aircraft that have satisfactorily completed production flight tests.
- (2) The permit issued under this regulation is an authorisation, including conditions and limitations for flight, which is set forth in the operations manual or manual of procedure of the holder of the operating certificate or authorisation approval, as the case may be.
- (3) The permit issued under this Regulation shall be valid only for flights within the borders of the Republic and over international waters. For flights over or within the territory of another State permission of the responsible aeronautical authority is required.”

Amendment of Part 43 of the Regulations

13. Part 43 of the Regulations is herewith amended by the substitution for the said Part of the following Part:

" PART43**General Maintenance Rules****LIST OF REGULATIONS:****GENERAL MAINTENANCE RULES****SUBPART 1: GENERAL**

- 43.01.1 Applicability
- 43.01.2 Falsification, reproduction or alteration of maintenance documents
- 43.01.3 Logbooks
- 43.01.4 Preservation of logbooks
- 43.01.5 Entries in logbooks
- 43.01.6 Entries of special significance
- 43.01.7 Maintenance of logbooks
- 43.01.8 Loss of logbooks

SUBPART 2: MAINTENANCE

- 43.02.1 Aircraft maintenance schedules
- 43.02.2 Persons to carry out maintenance
- 43.02.3 Carrying out of Maintenance
- 43.02.4 Rectification of unsatisfactory items
- 43.02.5 Overhaul, repair and substitution of major components
- 43.02.6 Maintenance for IFR operations
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- 43.02.8 Mandatory Inspections
- 43.02.9 Airspeed indicator and altimeter system tests and inspections
- 43.02.10 ATC transponder tests and inspections
- 43.02.11 Emergency locator beacon tests and inspections
- 43.02.12 Inspection requirements
- 43.02.13 Non-destructive testing
- 43.02.14 Airworthiness limitations
- 43.02.15 Modifications
- 43.02.16 Test flights
- 43.02.17 Temporary and permanent repairs after accidents or incidents
- 43.02.18 Aircraft compass requirements
- 43.02.19 Extended range twin turbine-engine operations (ETOPS)
- 43.02.20 Aircraft withdrawn from service for storage
- 43.02.21 Suspected, unapproved parts

SUBPART 3: RECORDING OF MAINTENANCE

- 43.03.1 Maintenance records
- 43.03.2 Recording of overhaul
- 43.03.3 Recording of major repairs and modifications
- 43.03.4 Recording of inspection and certification

SUBPART 4: RELEASE TO SERVICE

- 43.04.1 Persons to certify release to service
- 43.04.2 Requirements for certifying release to service
- 43.04.2A Validity of certificate of release to service
- 43.04.3 Certifying after inspection
- 43.04.4 Certifying after maintenance
- 43.04.5 Discrepancies
- 43.04.6 Flight manual data
- 43.04.7 Duplicate inspection of controls
- 43.04.8 Ground running checks – reciprocating engines
- 43.04.9 Ground running checks – turbine engines
- 43.04.10 Flight folio completion

SUBPART 1: GENERAL

Applicability

43.01.1(1) This part shall apply to the maintenance, and the release to service after maintenance, of –

- (a) aircraft registered in the Republic; and
- (b) aircraft components to be fitted to such aircraft.

(2) This part shall not apply in respect to any –

- (a) hang-glider including powered hang-glider;
- (b) paraglider including powered paraglider and paratrike;
- (c) unmanned free balloon;
- (d) captive unmanned balloon;
- (e) kite;
- (f) model aircraft or
- (g) parachute;

Falsification, reproduction or alteration of maintenance documents

43.01.2 No person shall make or cause to be made –

- (a) any fraudulent or false entry in any record, which is required to be made, kept, or used to show compliance with any requirement prescribed in this Part; or
- (b) any reproduction or alteration for fraudulent purposes, of any record or report

made in terms of the provisions of this Part.

Logbooks

43.01.3(1) Subject to the provisions of sub-regulation (2), the following logbooks shall be kept in respect of South African registered aircraft and other specified equipment for the purpose of recording therein the maintenance history of the equipment to which each relates:

- (a) an approved aircraft logbook for each aircraft;
 - (b) an approved engine logbook for each aircraft engine; and
 - (c) an approved propeller logbook for each propeller.
- (2) Certain non-type certificated aircraft have been exempted from the provisions of sub-regulation (1) in terms of regulation 94.03.2.
- (3) 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(s) within 48 hours after the return of the aircraft to its base of operation or entered within 48 hours of completion of any maintenance performed on the aircraft or other equipment at its base of operation.
- (4) All logbooks to be kept and maintained in terms of the preceding sub-regulations shall be made available to an authorised officer, an inspector or an authorised person at all times for inspection.
- (5) For an aircraft with a maximum approved passenger seat configuration in excess of nine seats, an aeroplane with a maximum certificated mass in excess of 5 700 kg, or a helicopter with a maximum certificated mass in excess of 3 175 kg the logbook may refer to a separate system approved in its approved maintenance schedule for component and major repair tracking. Any entry in such system shall meet the requirements as prescribed for logbooks.
- (6) The format of the logbooks shall be as prescribed in Document SA-CATS-GMR.

Preservation of logbooks

43.01.4 (1) The logbooks required to be kept in accordance with this regulation 43.01.3(1) shall be preserved for a period of not less than six months from the date of destruction of the airframe, engine or propeller for which they were kept: Provided that the Commissioner may prescribe a longer period in

respect of the logbooks of an aircraft, its engine(s) or propeller(s) involved on an accident or incident.

- (2) Logbooks shall preferably not be carried in the aircraft to which they relate. In the case where the provisions of sub-regulation (3) are applicable, or when logbooks are needed for maintenance purposes and no other means of forwarding such logbooks are reasonably available, the logbooks are to be carried in the relevant aircraft.
- (3) When an aircraft is exported and the logbooks are transported with the aircraft, a copy of the last major overhaul and repairs performed as well as copies of the defects rectification for the last six (6) months prior to export shall be retained by the exporter or the responsible aviation maintenance organisation, as the case may be.

Entries in logbooks

- 43.01.5** (1) Entries in logbooks required to be kept in accordance with regulation 43.01.3(1) shall be made and signed by the holder of an appropriate licence, a person holding a valid authorisation issued in terms of Part 145, or by a person approved for the purpose by the Commissioner. Matters that could not have come to the notice of such licence holder or approved person shall be entered and signed by the pilot-in-command.
- (2) Any record kept for the purpose of compiling a logbook entry or where reference is made to a record system other than the logbook shall be produced when called for in the event of any inspection or investigation by an authorised officer, inspector or authorised person.
 - (3) Entries in logbooks shall contain all the information and particulars provided for in the logbook.
 - (4) Whenever corrections are made to entries in a logbook, the correction shall be made in such a way that the original entry still remains legible. The use of tippex or similar correction methods is prohibited.

Entries of special significance

- 43.01.6** When repairs to an aircraft, aircraft engine or component or fixed or removable equipment were required in consequence either of damage caused by a forced or hard landing or of defects that occasioned a forced landing, the entry or entries made in the relevant logbook or books in respect of such repairs shall state that they were so required and shall identify the forced or hard landing in question.

Maintenance of logbooks

43.01.7 The logbooks referred to in regulation 43.01.3(1) shall be kept up to date and maintained in a legible and permanent manner and in accordance with the "Instructions for use" in the logbook.

Loss of logbooks

- 43.01.8** (1) When the registered owner of an aircraft reports the loss of a logbook currently in use, a request to open a substitute logbook shall be made in writing to the Commissioner accompanied by affidavit and appropriate data for the purpose of reconstructing the logbook.
- (2) When the Commissioner approves the opening of a substitute logbook, the relevant authorisation shall be made a permanent part of that logbook.
- (3) The procedure to be followed for the opening of a substitute logbook is prescribed in SA-CATS-GMR.
- (4) When a logbook has been lost, the relevant Certificate of Airworthiness or Authority to Fly shall be considered invalid until such time that all the requirements for the opening of a substitute logbook have been met.

SUBPART 2: MAINTENANCE

Aircraft maintenance schedules

- 43.02.1**(1) Each aircraft on the South African Civil Aircraft Register shall be maintained according to an approved aircraft maintenance schedule as prescribed in regulation 43.02.8.
- (2) The owner of an aircraft shall draw up, or have drawn up a maintenance schedule for his or her aircraft in accordance with the provisions of Technical Standard 43.02.8 in Document SA-CATS-GMR.
- (3) The owner or the responsible aircraft maintenance organization shall submit the proposed maintenance schedule to the Commissioner for approval.
- (4) Provided the proposed maintenance schedule meet all the requirements of Technical Standard 43.02.8, the Commissioner shall approve the proposed aircraft maintenance schedule either as submitted or as amended by him or her in the interest of aviation safety.
- (5) The owner may request the Commissioner for a permanent or temporary amendment to the approved aircraft maintenance schedule.
- (6) Notwithstanding the provisions of sub-regulations (1) to (5), the owner of a non-type certificated aircraft, operated in terms of Part 94 of these Regulations, may be exempted from the need to submit an aircraft maintenance schedule for approval to the Commissioner, provided he or she

maintains his or her aircraft in accordance with the provisions of Part 24 and Part 94.

Persons to carry out maintenance

- 43.02.2** (1) Subject to the provisions of sub-regulations (2) and (3), no person shall carry out maintenance on an aircraft or aircraft component unless such person –
- (a) is the holder of an aircraft maintenance engineer licence with an appropriate rating issued in terms of Part 66;
 - (b) carries out maintenance under the direct supervision of the holder of an aircraft maintenance engineer licence with an appropriate rating issued in terms of Part 66; or
 - (c) is authorised by the holder of an aircraft maintenance organization approval with an appropriate rating issued in terms of Part 145, to carry out maintenance within the scope of such approval.
- (2) The holder of a pilot licence with an appropriate type rating issued in terms of Part 61 or Part 62, may carry out the maintenance as prescribed in Document SA-CATS-GMR if –
- (a) such holder is the owner or operator of the aircraft; and
 - (b) the aircraft is used for non-commercial operations.
- (3) Any person may carry out maintenance on an amateur built aircraft or a production-built aircraft, or any component thereof, if such person –
- (a) is authorised by the Commissioner or by the organization designated for the purpose by the Commissioner in terms of Part 149, as the case may be, to carry out the maintenance; or
 - (b) carries out the maintenance under the direct supervision of a person authorised by the Commissioner or by the organization referred to in sub-regulation (a).
- (4) The routine maintenance, scheduled inspections, structural integrity inspections, overhaul, modification, major repairs and structural repairs on aeroplanes with a maximum certificated mass in excess of 5 700 kg or on helicopters with a maximum certificated mass in excess of 3 175 kg shall be undertaken and certified by an appropriately rated approved Aircraft Maintenance Organisation (AMO) only.

Carrying out of maintenance

- 43.02.3** Any person who carries out maintenance on an aircraft or aircraft component shall –
- (a) have available adequate accommodation and facilities for the necessary disassembly, proper inspection and re-assembly of the aircraft or aircraft component;
 - (b) use methods, techniques and practices which are –
 - (i) prescribed in the current manufacturer's maintenance manual or in any instructions for safe operation and continued airworthiness;
 - (ii) in accordance with the approved maintenance schedule for the aircraft;
 - (iii) in accordance with Document SA-CATS-GMR; or
 - (iv) approved by the Commissioner;
 - (c) use the tools, equipment and test apparatus necessary to ensure that the maintenance is carried out in accordance with the appropriate manufacturer's requirements or standard practices approved by the Commissioner;
 - (d) on completion of the maintenance, ensure that the condition of the aircraft or aircraft component is satisfactory for release to service and is at least equal to its original or properly modified condition with regard to –
 - (i) aerodynamic function;
 - (ii) structural strength;
 - (iii) resistance to vibration and deterioration; and
 - (iv) other qualities affecting airworthiness;
 - (e) use any special or test equipment recommended by the manufacturer, or equivalent equipment approved by the Commissioner; and
 - (9) if maintenance is carried out on an aircraft operated under an operating certificate, carry out such maintenance in accordance with the operator's approved maintenance control manual (MCM). The format and requirements for an MCM are prescribed in Document SA-CATS- GMR.

Rectification of unsatisfactory items

- 43.02.4 (1)** When during any maintenance or at any other time any part, product, component, equipment or item is found to be unserviceable or is unlikely to remain serviceable under normal operating conditions during the period preceding the next inspection, such rectification action as considered

necessary shall be taken to ensure the continued serviceability of the part, component or item prior to releasing the aircraft to service.

- (2) Deferred defects shall be transferred from the flight folio onto a work sheet. Any maintenance carried out to restore the serviceability of any part, component, equipment or item shall be clearly recorded in the relevant logbook or other approved recording system, and be certified by an appropriately rated licence or approval holder prior to releasing the aircraft to service.
- (3) The person certifying the entry referred to in sub-regulation (2) shall furthermore certify in the relevant flight folio that the deferred defect has been rectified, and he or she shall date and sign the entry accordingly.

Overhaul, repair and substitution of major components

- 43.02.5(1)** Unless the Commissioner has approved in writing, an aircraft and its components and installed equipment shall be overhauled or substituted at such times as recommended or specified by its manufacturer.
- (2) Overhaul of a Class I or Class II product and repairs to the primary structure of an aircraft, its engine(s) or propeller(s) shall be undertaken by an appropriately rated approved aircraft maintenance organisation only.
 - (3) The procedure for reinstating the validity of a certificate of airworthiness deemed suspended when an aircraft is involved in an accident or incident that renders one or more Class I products defective is prescribed in Document SA-CATS-GMR.
 - (4) The requirements for the overhaul of components and equipment installed on an aircraft and of engines and propellers are those prescribed in Document SA-CATS-GMR.
 - (5) Where the Commissioner has approved a time between overhaul (TBO) that differs from that recommended or specified by the manufacturer, such TBO shall be specified in the aircraft's approved maintenance schedule. Furthermore, where a manufacturer has not recommended or specified the overhaul of an item at certain times but where the Commissioner considers its overhaul at certain intervals necessary in the interest of safety, he or she may prescribe a time between overhaul for such item in the aircraft's approved maintenance schedule.
 - (6) The requirements for the substitution of products, components and parts with new or overhauled items are those prescribed in Documents SA-CATS-GMR.

Maintenance for IFR operations

43.02.6 Any person who carries out an inspection or maintenance on equipment required for communication, navigation and surveillance in an aircraft to be used under IFR shall carry out the inspection as prescribed in Document SA-CATS-GMR.

Mass and Balance

- 43.02.7** (1) Except with the written permission of the Commissioner, no person may operate any South African registered aircraft unless its current empty mass has been established by means of a mass meter and its centre of gravity computed within the preceding five years.
- (2) Whenever alterations are made which could influence an aircraft's empty mass or its centre of gravity, the mass and balance-data shall be amended.
- (3) An aircraft's empty mass shall be established by means of computation or by means of a mass meter by an appropriately approved aircraft maintenance organization or a person acceptable to the Commissioner. The aircraft's new centre of gravity shall be computed thereafter.
- (4) The mass meter to be used shall, within the periods of 12 months immediately preceding the date of determination of the aircraft's empty mass, –
- (a) have been certified by a Government Assize Officer; or
- (b) if an electronic mass meter, have been tested by the South African Bureau of Standards or a similar body acceptable to the Commissioner.
- (5) The mass and centre of gravity data, as supplied by the manufacturer in respect of new aircraft, shall be acceptable for the purpose of this regulation for the first five-year period, provided that the empty mass was established by means of a mass meter.
- (6) For the purpose of this regulation, the empty mass of an aircraft (as ascertained when the mass was last determined or computed) shall be the mass of the aircraft and its powerplant(s), including any engine coolant, unusable fuel, total oil, total hydraulic fluid, any fixed ballast, and all items of fixed equipment.
- (7) Notwithstanding the provisions of the preceding sub-regulations, the Commissioner may at any time, when he or she deems it necessary in the interest of public safety, require the mass of any aircraft to be

established by means of a mass meter or its centre of gravity to be computed.

- (8) The procedure to establish mass and the form on which the results of balance computations must be recorded is prescribed in the Document SA-CATS-GMR.

Mandatory inspections

43.02.8(1) Mandatory tests and inspections shall be carried in accordance with the approved maintenance schedule for a particular aircraft at the prescribed times or intervals.

(2) Mandatory inspections include—

(a) for aeroplanes with a maximum certificated mass of 5 700 kg or less or a maximum approved passenger seating configuration of not more than 9 seats, and for helicopters with a maximum certificated mass of 3 175 kg or a maximum approved passenger seating configuration of not more than 9 seats, either –

- (i) a mandatory periodic inspection; or
- (ii) inspections in accordance with an approved progressive inspection programme;

(b) for any aircraft, other than those referred to in paragraph (a), the approved maintenance schedule for the particular category and type of aircraft at the intervals prescribed by the schedule.

(3) An aircraft referred to in sub-regulation (2)(a)(i) that has not accumulated 100 hours within 12 months since its last inspection shall undergo a mandatory periodic inspection before it is being released to service.

(4) An aircraft referred to in sub-regulation (2) (a) (ii) that has not completed its progressive inspection programme within the period specified by the manufacturer or the Commissioner shall undergo the remainder of the progressive inspection programme before it is being released to service.

(5) The maintenance schedules referred to in sub-regulation (1) are defined in Document SA-CATS-GMR

Air Speed Indicator and Altimeter system tests and inspections

- 43.02.9** Any person who carries out air speed indicator and altimeter system tests and inspections shall –
- (a) perform the tests and inspections as prescribed in Document SA-CATS-GMR; and
 - (b) for the altimeter tests, record on the altimeter case, the date on which and maximum altitude to which the altimeter has been tested.

ATC transponder tests and inspections

- 43.02.10** Any person who carries out ATC transponder tests and inspections shall perform the tests and inspections as prescribed in Document SA-CATS-GMR.

Emergency locator beacon tests and inspections

- 43.02.11** Any person who carries out emergency locator beacon tests and inspections shall perform the tests and inspections as prescribed in Document SA-CATS-GMR.

Inspection requirements

- 43.02.12** Any person who carries out an inspection shall –
- (a) carry out the inspection so as to determine that the aircraft or aircraft component under inspection, complies with all appropriate airworthiness requirements prescribed in Part 21 or Part 24, as the case may be; and
 - (b) if carrying out a mandatory periodic inspection, progressive inspection or scheduled inspection, use a checklist, which includes the scope and detail of the tests and inspections, referred to in Regulation 43.02.8.

Non-destructive testing

- 43.02.13** Any person who performs a non-destructive test on an aircraft, aircraft component or aircraft part shall –
- (a) be a holder of a certificate appropriate to the technique being used and to the level of qualification required, as specified in Document SA-CATS-GMR, or an equivalent certificate approved by the Commissioner;

- (b) perform the non-destructive test using appropriate methods, techniques and standard practices, as specified in Document SA-CATS- GMR; and
- (c) use test equipment necessary to ensure that the non-destructive test is performed in accordance with the appropriate manufacturer's requirements.

Airworthiness limitations

- 43.02.14** Any person who carries out maintenance specified in the Airworthiness limitations section of a manufacturer's maintenance manual, or any instructions for safe operation and continued airworthiness, shall carry out the maintenance in accordance with that section.

Modifications

- 43.02.15**(1) No person shall, without the prior written approval of the Commissioner, carry out any modifications, including changes to equipment or the installation thereof, which affect, or are likely to affect, the serviceability of the aircraft, or the safety of its occupants or of any other persons or property,
- (2) Before the approval of the Commissioner is considered for a modification as referred to in sub-regulation (1), the owner of the aircraft, or any other person who applies for the modification, shall –
 - (a) furnish the Commissioner with such information, data, calculations, reports on tests, drawings or wiring diagrams relating to the design, and proof of effectiveness or airworthiness of such modification, as the Commissioner may require; and
 - (b) be accompanied by the appropriate fee as prescribed in Part 187.
 - (3) Notwithstanding the provisions of sub-regulations (1) and (2), such modifications as may from time to time be recommended by the manufacturer of the type of aircraft or equipment concerned, may be carried out if the modifications are carried out in accordance with the said manufacturer's recommendations.

Pest flights

- 43.02.16** (1) After any major repair or major modification to an aircraft, test flights shall, if required by the Commissioner, be carried out in the aircraft under such conditions and in the manner as prescribed in the SA-CATS-GMR.
- (2) Only essential crew shall be carried aboard any aircraft undergoing a test flight.

Temporary and permanent repairs after accidents or incidents

- 43.02.17** (1) Any repair to an aircraft or aircraft component, which has been damaged after an accident or an incident, shall be carried out in accordance with the requirements as prescribed in Document **SA-CATS-GMR**.
- (2) Following the permanent repair of an aircraft that has been involved in an accident, as defined in paragraph (b) of the definition of 'accident' in Part 1 of these Regulations, the aircraft shall be inspected by an airworthiness inspector of the Civil Aviation Authority, or another person specifically appointed for the purpose in writing by the Commissioner, before it is released to service.
- (3) The maintenance organization or repair facility that carried out the repair shall pay the applicable inspection fees as prescribed in Part 187.

Aircraft compass requirements

- 43.02.18** Any compass fitted to an aircraft shall be swung and maintained in accordance with the requirements as prescribed in Document SA-CATS-GMR.

Extended range twin turbine-engine operations (ETOPS)

- 43.02.19** The additional maintenance requirements for twin-engine turbine aeroplanes certified for extended-range operations are prescribed in Document **SA-CATS-GMR**.

Aircraft withdrawn from service for storage

- 43.02.20** Aircraft withdrawn from service for storage shall meet the preservation instructions of the aircraft's manufacturer as prescribed in the relevant maintenance manuals, service bulletins, service letters or service instructions for the inoperative period. Before such an aircraft is returned to service, any prescribed maintenance shall be carried out prior to release to service.

Suspected, unapproved parts

- 43.02.21** Any Class I, Class II or Class III part, component or product, whether new or previously used, for which no historical records are available or traceable, or for which the available records **do** not confirm that they have been approved by a responsible aviation authority, shall be considered to be unserviceable and may not be fitted to any type-certificated aircraft, nor to any non-type certificated aircraft operated or intended to be operated in terms of Part 96.

SUBPART 3: RECORDING OF MAINTENANCE

Maintenance records

- 43.03.1(1)** any person who carries out maintenance on an aircraft or aircraft component shall record, on completion of the maintenance –
- (a) details of the maintenance including, where applicable, the type of inspection and any approved data used;
 - (b) for a mandatory periodic, progressive or scheduled inspection, whether a detailed inspection or routine inspection of the particular components or areas of the aircraft was carried out;
 - (c) the serial numbers, if any, of components removed or fitted;
 - (d) details of measurements or test results obtained, including the results of any ground or air tests;
 - (e) for an air speed indicator or altimeter system pitot static test and inspection, the date on which, and maximum altitude to which the altimeter has been tested;
 - (f) the date of completion of such maintenance;
 - (g) the references to the documents used to carry out the maintenance and their revision status;
 - (h) the name of the person completing such maintenance, if other than the person certifying the release to service;
 - (i) the location and, if applicable, the name of the facility where such maintenance was carried out; and
 - (j) where such maintenance has been carried out as a consequence of the failure of any equipment, or damage caused by forced landing or accident, the reasons for carrying out the maintenance.
- (2) The person who carries out the maintenance shall –
- (a) record the details referred to in sub-regulation (1) in the appropriate logbook or in a maintenance record approved by the Commissioner;
 - (b) where worksheets or other associated maintenance records are used to document the details of the maintenance, make a reference to those records in the logbook, flight folio-or- in the maintenance-record approved by the Commissioner.
- (3) The manner for completion of logbooks, flight folios and maintenance records, referred to in sub-regulation (2), and the period for which such documents shall be retained are prescribed in SA-CATS-GMR.

Recording of overhaul

- 43.03.2** No person shall state in any maintenance document entry required by the Regulations, including a job card, logbook or a certificate of release to service, that an aircraft, airframe, engine or engine module, propeller, rotor, appliance or other aircraft component has been overhauled unless it has been –
- (a) disassembled, cleaned, inspected, repaired as necessary, and reassembled, using methods, techniques and practices acceptable to the Commissioner; and.
 - (b) tested to the original tolerances and limits or to approved oversize or undersize dimensions in accordance with –
 - (i) current approved standards and technical data that have been developed and documented by the holder of a type certificate or supplemental type certificate issued in terms of Part 21 in a manual, airworthiness directive, service letter, service bulletin or other similar document declared mandatory by the Commissioner; or
 - (ii) other standards or technical data approved by the Commissioner.

Recording of major repairs and modifications

- 43.03.3** Any person who carries out a major repair or a major modification shall, in addition to the entry referred to in Regulation 43.03.01, record the repair or modification and process the certificate relating to the maintenance of the aircraft in the manner as prescribed in Document SA-CATS-GMR.

Recording of inspection and certification

- 43.03.4 (1)** Any inspection prescribed in regulation 43.02.8 must be recorded in the appropriate logbook(s) and be certified as follows:
- (a) Mandatory inspections or any maintenance to an aircraft issued with a standard category certificate of airworthiness: By the holder of an aircraft maintenance organisation (AMO) approval with the appropriate ratings.
 - (b) Mandatory inspections or any maintenance to an aircraft with an Authority to fly issued in terms of Part 24: By the holder of an aircraft maintenance engineer (AME) licence or an Approved Person certificate, issued in terms of Part 66, with the appropriate ratings.
- (2) Any aircraft on which the last mandatory inspection was certified by the holder of an aircraft maintenance engineer licence and for which the issue of a standard category

certificate of airworthiness in terms of Part 21 is requested, shall be inspected and certified by the holder of an appropriately-rated approved aircraft maintenance organization.

- (3) Any overhaul classed as mandatory for aircraft issued with a standard category certificate of airworthiness shall be carried out at the times specified and be certified in the prescribed manner by an appropriately rated approved aircraft maintenance organization only.
- (4) Any additional work, performed during an inspection, shall be recorded on a checklist and be certified in the relevant logbook(s) by the responsible aircraft maintenance engineer or by an authorised person in the aircraft maintenance organisation concerned.
- (5) Records pertaining to life-limited or previously used parts must be available and traceable. Parts with no historical record shall be considered to be unserviceable and such parts shall not be fitted to an aircraft.

SUBPART 4: RELEASE TO SERVICE

Persons to certify release to service

- 43.04.1(1)** No person shall certify an aircraft or aircraft component for release to service after maintenance unless such person –
- (a) is the holder of an aircraft maintenance engineer licence with an appropriate rating issued in terms of Part 66;
 - (b) is authorised by the holder of an aircraft maintenance organization approval with an appropriate rating issued in terms of Part 145, to certify maintenance within the scope of such approval;
 - (c) is authorized by the Commissioner to certify an aircraft or aircraft component for release to service; or in the case of an amateur built or production built aircraft issued with an Authority to fly in terms of Part 24 by the organization designated for the purpose in terms of Part 149
 - (d) for maintenance carried out outside the Republic, holds a licence or equivalent authorisation issued by an appropriate authority acceptable to the Commissioner, for the type of aircraft or aircraft component.
- (2) The holder of a pilot licence with an appropriate type rating issued in terms of Part 61 or Part 62 may certify maintenance which has been carried out in accordance with the conditions referred to in Regulation 43.02.2(2).

Requirements for certifying release to service

- 43.04.2** No person shall certify an aircraft or aircraft component for release to service after maintenance unless such maintenance has been carried out in accordance with the provisions of this Part and, in respect of such maintenance, the aircraft or aircraft component is fit for release to service.

Validity of a certificate of release to service

- 43.04.2A (1)** A certificate of release to service for an aircraft shall be validated for a period not exceeding 12 months or 100 hours of flight time, whichever comes first, or such other time as approved in the progressive inspection programme referred to in sub-regulation 43.02.8(2)(a)(ii).
- (2) When a certificate of airworthiness becomes invalid due to an aircraft sustaining a defect not affecting the primary structure, the validity of the certificate is restored when the defect has been rectified and the necessary certification has been made.
- (3) When a certificate of airworthiness becomes invalid due to an aircraft sustaining a serious defect in an accident or incident that affects the serviceability of a Class I product, the certificate of release to service shall be invalidated.

Certifying after inspection

- 43.04.3** Any person who certifies an aircraft or aircraft component for release to service after carrying out an inspection shall enter in the appropriate logbook or other maintenance record approved by the Commissioner –
- (a) the statement as prescribed in Document SA-CATS-GMR;
and
- (b) his or her signature, licence or authorisation number and the date of the entry.

Certifying after maintenance

- 43.04.4 (1)** Any person who certifies an aircraft or aircraft component for release to service after maintenance shall enter in the appropriate logbook or other maintenance record approved by the Commissioner –
- (a) the statement as prescribed in Document SA-CATS-GMR;
and
- (b) his or her signature, licence or authorisation number and the date of the entry.

- (2) If components are not installed in or allocated to an aircraft, the person certifying release to service shall certify the release to service on the appropriate form as prescribed in Document SA-CATS-GMR.

Discrepancies

- 43.04.5** Any person who carries out an inspection and who does not release the aircraft or aircraft component to service shall –
- (a) provide the owner or operator with a signed and dated list of the discrepancies, including any equipment which is marked "inoperative" in terms of paragraph (b), if such person is satisfied that the aircraft –
 - (i) is not airworthy; or
 - (ii) does not comply with the applicable type certificate data, airworthiness directives or other approved data upon which the airworthiness of such aircraft depends;
 - (b) for those items, which appear to be imperative, place a label on each inoperative instrument and the cockpit controls of each item of inoperative equipment, marking each item "Inoperative";
 - (c) enter the date of entry, his or her signature, licence or authorization number and the appropriate statement, as prescribed in Document SA-CATS-GMR, in the appropriate logbook or flight folio.

Flight manual data

- 43.04.6** If the approved data for a repair or modification to an aircraft or aircraft component include changes to the operating limitations or flight data in the aircraft flight manual, the person certifying release to service shall not certify the release to service until the changes have been incorporated into the flight manual.

Duplicate inspection of controls

- 43.04.7 (1)** No person shall certify an aircraft component for release to service after the initial assembly, subsequent disturbance or adjustment of any part of an aircraft or component control system unless –
- (a) a duplicate safety inspection of the control system has been carried out; and
 - (b) the duplicate safety inspection is recorded and certified in the appropriate logbook, or other maintenance record approved by the Commissioner.

- (2) A duplicate safety inspection authorised in terms of sub-regulation (1), shall consist of-
- (a) an inspection by a person referred to in Regulation 43.04.1 to certify the release to service of the control system after maintenance; and
 - (b) a second inspection carried out by another person who is a person referred to in Regulation 43.04.1.

Ground running checks – reciprocating engines

43.04.8 No person shall certify a reciprocating engine-powered aircraft for release to service after a mandatory inspection unless such person ensures that –

- (a) a ground run of the aircraft engine has been carried out to determine satisfactory performance, in accordance with the manufacturer's recommendations, for –
 - (i) the power output (static and idle RPM);
 - (ii) the ignition system;
 - (iii) the fuel and oil pressure; and
 - (iv) the cylinder or coolant temperature, and oil temperature; and
- (b) the ambient conditions of temperature and atmospheric pressure and details of the results are recorded –
 - (i) in the appropriate engine or aircraft logbook; and
 - (ii) in the maintenance record.

Ground running checks – turbine engine

43.04.9 No person shall certify a turbine engine-powered aircraft for release to service after a mandatory inspection unless such person ensures that –

- (a) a ground run of the aircraft engine has been carried out to determine satisfactory performance, in accordance with the manufacturer's recommendations;
- (b) the ambient conditions of temperature and atmospheric pressure and details of the results are recorded;
- (c) the engine parameters are recorded in accordance with the manufacturer's recommendations--

- (i) in the appropriate engine or aircraft logbook; or
- (ii) in the maintenance record.

Flight folio completion

43.04.10 No person shall certify an aircraft or aircraft component for release to service in an aircraft flight folio unless each applicable section of the flight folio has been completed. This includes the section where any rectification of deferred defects must be recorded.

Amendment of Regulation 47.00.10 of Part 47 of the Regulations

14 Regulation 47.00.10 of the Regulations is herewith amended by-

- (a) the substitution for sub-regulation (4) of the following sub-regulation:
 - “(4) A certificate of registration shall no longer be valid from the fifteenth day after the date on which the holder of the certificate of registration has transferred to another person the permanent and unconditional right of possession of the aircraft.”;
- (b) the substitution for the introductory paragraph of sub- regulation (5) of the following introductory paragraph:
 - “(5) From the date on which a certificate of registration has become invalid in terms of sub-regulation (4), no person shall use the aircraft specified in the certificate unless and until such time as-
 - and
 - (c) the substitution for the expression “From the commencement of the fifteenth day after the day on which a certificate of registration expires” in sub- regulation (6) of the following expression “From the date on which a certificate of registration has become invalid in terms of sub-regulation (4);”.

Amendment of Regulation 47.00.11 of Part 47 of the Regulations

15. Regulation 47.00.11 of the Regulations is herewith amended by the substitution for paragraph (b) of sub-regulation (3) of the following paragraph;

- “(b) is damaged beyond repair and becomes permanently useless as an aircraft; or;”

Amendment of Regulation 47.00.12 of Part 47 of the Regulations

16. Regulation 47.00.12 is herewith amended by the substitution for paragraph (b) of sub-regulation (2) of the following paragraph:

"(b) that the certificate of registration has been invalidated in terms of regulation 47.00.10(4) and has not received an application as referred to in regulation 47.00.1 1(2); "

Amendment of Regulation 47.00.13 of Part 47 of the Regulations

17. Regulation 47.00.13 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

"Duration of certificate of registration

47.00.13 (1) A certificate of registration shall remain in force until-

- (a) it has been invalidated in terms of regulation 47.00.10(4); or
 - (b) the registration of the aircraft is cancelled by the Commissioner.
- (2) The holder a certificate of registration which has become invalid, in terms of this Part, shall surrender the certificate of registration to the Commissioner within 14 days from the date on which the certificate became invalid."

Amendment of Regulation 65.02.2 of Part 65 of the Regulations

18. Regulation 65.02.2 of the Regulations is herewith amended by-

- (a) the numbering of the existing regulation as sub-regulation (1); and
 - (b) the addition of the following sub-regulation as sub-regulation (2):
- "(2) Should an air traffic controller, who holds a current validation for a particular rating and having held such a validation for a minimum period of 12 months, be required to revalidate the particular rating at a different air traffic service unit, such air traffic controller shall have provided the relevant service, under the supervision of an air traffic service instructor (operational), at an air traffic service unit for which the rating validation is

sought, for a period equal to at least 50 percent of the hours relevant to the original rating validation.”

Amendment of Regulation 65.02.6 of Part 65 of the Regulations

19. Regulation 65.02.6 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

“(2) The holder of an air traffic service licence and rating shall submit copies of all documentation reflecting continued maintenance of competency to the Commissioner within 21 days after compliance with the appropriate requirements prescribed in this Part.”

Amendment of Regulation 65.08.5 of Part 65 of the Regulations

20. Regulation 65.08.5 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

“**65.08.5** An applicant for the validation of an aerodrome control rating shall, under the supervision of an air traffic service instructor (operational), have provided aerodrome control services at the air traffic service unit for which the rating validation is sought for at least 100 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining at the position for which the validation is sought.”

Amendment of Regulation 65.10.5 of Part 65 of the Regulations

21. Regulation 65.10.5 of the Regulations is herewith amended by the substitution of the said regulation of the following regulation:

“**65.10.5** An applicant for the validation of an area control rating shall, under the supervision of an air traffic service instructor (operational), have provided area control services at the air traffic service position for which the rating validation is sought for at least 200 hours, 50 percent of which may be provided on a simulator which accurately simulates the environment pertaining to the position for which the validation is sought.”

Amendment of regulation 66.01.5 of Part 66 of the Regulations

22. Regulation 66.01.5 of the Regulations is herewith amended by the deletion of sub-regulations (5), (6) and (7).

Amendment of regulation 66.08.1 of Part 66 of the Regulations

23. Regulation 66.08.1 of the Regulations is herewith amended by the substitution for paragraph (c) thereof of the following paragraph:

"(c) hold at least one valid rating: Provided that, where the applicant is the holder of a Category B or D rating for a particular type of an aircraft or engine, he or she shall also be the holder of a Category A or C rating, as applicable, for that type of aircraft or engine;"

Amendment of regulation 66.09.1 of Part 66 of the Regulations

24. Regulation 66.09.1 of the Regulations is herewith amended by the substitution for paragraph (c) thereof of the following paragraph:

"(c) hold at least one valid rating: Provided that, where the applicant is the holder of a Category B or D rating for a particular type of aircraft or engine, he or she shall also be the holder of a Category A or C rating, as applicable, for that type of aircraft or engine;"

Amendment of Regulation 67.00.5 of Part 67 of the Regulations

25. Regulation 67.00.5 of the Regulations is herewith deleted.

Amendment of Regulation 67.00.11 of Part 67 of the Regulations

26. Regulation 67.00.11 of the Regulations is herewith amended by-
- (a) the substitution in sub-regulation (6) for the words "Medical Dental and Supplementary Health Service Professions Act, 1974," of the words Health Professions Act, 1974;"; and
 - (b) the insertion of the following sub-regulation after sub-regulation (8):
"(9) The designated panel of medical practitioners may also serve to advise the Commissioner on any matter related to medical conditions affecting licensed personnel. Any other service to be performed by the panel shall be agreed to in writing by the panel and the Commissioner."

Amendment of regulation 91.02.3 of Part 91 of the Regulations

27. Regulation 91.02.3 of the Regulations is herewith amended by the substitution for paragraph (e) of sub-regulation (3) of the following paragraph:

- “(e) in the case of an operation carried out in terms of Part 121, Part 127 or Part 135:
- (i) 10 hours during any flight time and duty period of which maximum eight hours may be consecutive;
 - (ii) 32 hours during the preceding seven days;
 - (iii) 100 hours during the preceding thirty days;
 - (iv) 1000 hours during the preceding 365 days; or
 - (v) as specified in the operator’s approved flight time and duty period scheme.”

Amendment of regulation 91.02.8 of Part 91 of the Regulations

28. Regulation 91.02.8 of the Regulations is herewith amended by-

- (a) the addition of the following paragraph after paragraph (j) in sub-regulation (4):
- ”(k) If the aircraft is equipped with an ELT, prior to engine shut-down at the end of each flight as part of the post-flight checks, tune the VHF receiver to 121, 5 MHz to listen for ELT activation. If the ELT has been activated inadvertently as the result of a hard landing or for other reasons, this shall be reported-
- (i) immediately through the nearest **ATS** unit to the ARCC; and
 - (ii) in the appropriate flight log as maintenance may be required before it is returned to service.”
- and
- (b) the substitution for paragraph (a) of sub-regulation (5) of the following paragraph:
 - ”(a) oxygen is available to flight crew members and passengers if flights in non-pressurized aircraft are contemplated
 - (a) above 10 000 feet and up to 12 000 feet in excess of 120 minutes intended flight time; or
 - (b) above 12 000 feet; and.”

Amendment of Regulation 91.04.5 of Part 91 of the Regulations

29. Regulation 91.04.5 of the Regulations is herewith amended by the deletion of paragraph (i).

Amendment of Regulation 91.04.6 of Part 91 of the Regulations

30. Regulation 91.04.6 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

"Additional equipment for single-pilot operation under IMC or at night

- 91.04.6(1)** No owner or operator of an aircraft shall conduct single-pilot operations in an aircraft under instrument meteorological conditions or at night unless –
- (a) the single pilot flying is equipped with a headset with boom microphone or equivalent, and has a transmit button positioned in such a way that it may be operated without the pilot having to remove his or her hands from the control wheel, joy stick or cyclic stick; and
 - (b) if the aircraft is flown under instrument meteorological conditions, such aircraft has been certificated for single pilot IFR operations; and is equipped with a serviceable automatic flight control system with at least altitude hold and heading mode; or
 - (c) in the case of a helicopter, if it is flown at night under visual meteorological conditions, such helicopter is equipped with a serviceable automatic flight control system with at least altitude and heading mode, or similar equipment provided that this requirement shall not apply to a helicopter operated in the circuit of the aerodrome of departure or over densely populated, well-lighted areas in accordance with the provisions of regulation 91.06.32(2) but not higher than 3 500 feet above the prescribed minimum height.

Amendment of Regulation 91.04.10 of Part 91 of the Regulations

31. Regulation 91.04.10 of the Regulations is herewith amended by the substitution for the expression "every six months" in paragraph (a) of sub-regulation (9) of the expression "annually."

Amendment of regulation 91.05.1 of Part 91 of the Regulations

32. Regulation 91.05.1 of Part 91 of the Regulations is herewith amended by the substitution for sub-regulation (1) of the following sub-regulation:

-
- "(1) Except with prior written approval by the Commissioner, no owner or operator of an aircraft shall operate, or allow the aircraft to be operated, –
- (a) in airspace; or
 - (b) under flight rules which in terms of regulation 172.02.2 (Classification of airspace), or
 - (c) in airspace calling for special rules in this regard, that require the aircraft to maintain two-way communication with an air traffic service unit, unless such aircraft is equipped with radio communication equipment capable thereof."

Amendment of regulation 91.07.23 of Part 91 of the Regulations

33. Regulation 91.07.23 of Part 91 of the Regulations is herewith amended by the substitution for sub-regulation (1) of the following sub-regulation:

- “(1) The pilot-in-command of an aircraft shall ensure that flight crew members engaged in performing duties essential to the safe operation of an aircraft in flight, use supplemental oxygen -
- (a) continuously when the flight deck pressure exceeds 10 000 feet for more than 120 minutes flight time; and
 - (b) at all times when the flight deck pressure exceeds 12 000 feet.”.

Insertion of Regulation 91.07.32 into Part 91 of the Regulations

34. The following regulation is herewith inserted into the Regulations after regulation 91.07.31:

“Simulated Instrument Flight in aircraft

91.07.32(1) The owner or operator of an aircraft shall ensure that no person operates the aircraft in simulated instrument flight in visual meteorological conditions unless --

- (a) the other aircraft control seat is occupied by a safety pilot who possesses at least a private pilot licence with category and class ratings appropriate to the aircraft being flown;
- (b) the safety pilot has adequate vision forward and to each side of the aircraft, or there is a competent observer in the aircraft who adequately supplements the vision of the safety pilot; and
- (c) except in the case of lighter-than-air aircraft, the aircraft is fitted with fully functioning dual controls: Provided that simulated instrument flight may be conducted in a single-engine aircraft, equipped with a single, functioning throw-over control wheel in place of fixed dual controls of the elevator and ailerons, when --
 - (i) the safety pilot has determined that the flight can be conducted safely; and
 - (ii) the person manipulating the controls has at least a private pilot licence with appropriate category, class and type or group type ratings.

- (2) When simulated instrument flight is being practised by a pilot, at least one of the two pilots shall hold the appropriate valid type or group type rating in respect of the aircraft being flown and act as the pilot-in-command.
- (3) When a simulated instrument flight takes place at night in VMC, the safety pilot shall be the holder of a valid instrument rating.
- (4) When simulated instrument flight is being practised for the purpose of obtaining an instrument rating, the safety pilot shall be an appropriately rated flight instructor."

Amendment of Regulation 91.09.4 of Part 91 of the Regulations

- 35.** Regulation 91.09.4 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

"Aeroplane performance classification

91.09.4 For performance purposes, aeroplanes are classified as follows:

- (a) Class A aeroplanes –
 - (i) multi-engine aeroplanes powered by turbo-propeller engines with a maximum certificated mass exceeding 5 700 kilograms; and
 - (ii) multi-engine turbojet-powered aeroplanes;
- (b) Class B aeroplanes – propeller-driven multi-engine aeroplanes with a maximum certificated mass of 5 700 kilograms or less;
- (c) Class C aeroplanes – aeroplanes powered by two or more reciprocating engines with a maximum certificated mass exceeding 5 700 kilograms; and
- (d) Class D aeroplanes –single-engine aeroplanes."

Amendment of regulation 121.02.1 of Part 121 of the Regulations

36. Regulation 121.02.1 of the Regulations is herewith amended by-

- (a) the substitution for sub-regulation (6) of the following sub-regulation:

"(6) For operations in IMC or by night in a large commercial air transport aeroplane, an operator shall ensure that the minimum flight crew includes a properly rated second pilot: Provided that for all-cargo operations with a Class D aeroplane a single-pilot operation is allowed if –

 - (i) the aeroplane has been certificated and is equipped for single-pilot IFR operation, as prescribed by Regulation 121.05.3;

- (ii) the operator has included in the operations manual, referred to in Regulation 121.04.2, an approved conversion and recurrent training programme for pilots, which includes the additional requirements for a single-pilot operation, as prescribed by Regulation 121.03.3; and
 - (iii) the pilot-in-command shall have completed, in aeroplanes, not less than 1 500 hours of flight time, of which –
 - (aa) 250 hours shall be as pilot-in-command, or not less than 100 hours as pilot-in-command and the necessary additional flight time as co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command;
 - (bb) 200 hours shall be cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command;
 - (cc) 75 hours shall be instrument time, of which not more than 30 hours may be acquired in a simulator;
 - (dd) 100 hours shall be night flight time as pilot-in-command or as co-pilot; and
 - (ee) not more than 100 hours may be acquired in a simulator, of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer”.
 - (b) the insertion of the following sub-regulation after sub-regulation (6);
- “(6A) Notwithstanding the proviso to sub-regulation (6), no person may operate an aeroplane in a Category II or Category III approach and landing operation unless the flight crew includes a properly rated second pilot.”;
- (c) the insertion of the following sub-regulation after sub-regulation (7):

(8) Nothing in this regulation shall be construed as meaning that a flight under IFR or at night for the purpose of flight instruction conducted by an appropriately rated flight instructor would be a single-pilot operation, or that such a training flight, if conducted in terms of Part 121, would require to be operated by two qualified pilots.”.

Amendment of regulation 121.05.3 of Part 121 of the Regulations

37. Regulation 121.05.3 of the Regulations is herewith amended by-

- (a) the insertion of the following paragraphs after paragraph (k) of sub-regulation (1):

- " (l) if a multi-engine aeroplane, at least two generators or alternators, each of which is on a separate engine, of which any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the aeroplane; or
- (m) if a single-engine aeroplane,:
- (i) two independent electrical power-generating sources, each of which is able to supply all probable combinations of continuous in-flight electrical loads for required instruments or equipment;
 - (ii) a stand-by battery or an alternate source of electrical power that is capable of supplying 150% of the electrical loads of all required instruments and equipment necessary for safe emergency operation of the aeroplane for at least one hour;
 - (iii) an approved operative auto-pilot system, capable of operating the aircraft controls to maintain flight and manoeuvre it about the three axis; and
 - (iv) if the aeroplane is fitted with a turbo engine—
 - (aa) an auto-ignition system or use of continuous ignition during take-off, landing and flight during heavy precipitation; and
 - (bb) a manual throttle that bypasses the governing section of the fuel control unit, and permits continued unrestricted operation of the engine in the event of a fuel control unit failure.

Note: For the purpose of subparagraph (1)(m)(i), a continuous in-flight electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.";

and

- (b) the insertion of the following sub-regulation after sub-regulation (5)

"(6) If the aeroplane to be operated in IMC or by night is a performance Class D aeroplane, the aeroplane shall furthermore be equipped with IFR-approved area navigation equipment that provides immediate identification and heading to the nearest suitable aerodrome".

Amendment of regulation 121.05.6 of Part 121 of the Regulations

38. Regulation 121.05.6 of the Regulations is herewith amended by the substitution for said regulation of the following regulation:

- "121.5.6 (1) Subject to the provisions of sub-regulation (2), the operator of a large commercial air transport aeroplane shall not operate the aeroplane whenever such aeroplane is being operated by night or in IMC in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radars, may be expected to exist along the route unless such aeroplane is equipped with airborne weather radar equipment.
- (2) In the case of a non-pressurized aeroplane, the airborne weather radar equipment may however be substituted by other approved equipment, which is capable of detecting thunderstorms and other potentially hazardous weather conditions, and of providing the flight crew with bearing and distance of such detected conditions."

Amendment of regulation 121.08.27 of Part 121 of the Regulations

39. Regulation 121.08.27 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

"General

121.08.27 (1) The regulations in this Division shall apply to –

- (a) the operator of a Class B aeroplane that does not comply with the performance operating instructions prescribed in Division Two; and
 - (b) the operator of a Class D aeroplane.
- (2) Notwithstanding the provisions of sub-regulation (1), an operator who operates such aeroplane, at the time this regulation comes into operation, under performance operating limitations approved by the Commissioner in the past, may continue to do so. Such performance operating limitations need not be more restrictive than those prescribed in this Division.
- (3) The operator of an aeroplane referred to in sub-regulation (1), shall ensure that, for determining compliance with the requirements prescribed in this Division, the approved performance data in the aeroplane flight manual referred to in regulation 121.04.4 is supplemented, as necessary, with other approved data if the approved performance data in such aeroplane flight manual are insufficient."
- (4) The operator of an aeroplane referred to in sub-regulation (1) shall not use such aeroplane for the provision of any scheduled public air transport service unless a Class B or Class C aeroplane is available as a back-up in case the provisions of sub-regulation (5) cannot be met.
- (5) The operator of an aeroplane referred to in sub-regulation (1), carrying passengers, shall not operate such aeroplane under IMC or above more than three eighths of clouds within a radius of five nautical miles of the aeroplane, unless the latest

weather reports or forecasts, or any combination of them, indicate that the weather along the planned route (including take-off and landing), with due regard for the provisions of regulation 121.08.31, allows flight under VFR under the ceiling (if a ceiling exists) at prescribed minimum heights established in terms of regulation 121.07.6, and that the weather is forecast to remain so until at least one hour after the estimated time of arrival at the destination."

Amendment of regulation 121.09.2 of Part 121 of the Regulations

40. Regulation 121.09.2 of the Regulations is herewith amended by the insertion of the following sub-regulations after sub-regulation (4):

- "(5) The operator of a large commercial air transport Class D aeroplane, carrying passengers at night or in IMC, shall include in the schedule, referred to in sub-regulation (1) –
- (a) either the manufacturer's recommended engine trend monitoring programme, which includes an oil analysis, if appropriate; or
 - (b) an engine trend monitoring programme, approved by the Commissioner, that includes an oil analysis at each 100 hours interval or at the manufacturer's suggested interval, whichever is more frequent.
- (6) The results of each test, observation, and inspection, required by the applicable engine trend monitoring programme prescribed by sub-regulation (5) shall be recorded and maintained in the engine maintenance records.
- (7) The schedule shall contain, in respect of any aeroplane referred to in sub-regulation (5), written maintenance instructions containing the methods, techniques, and practices necessary to maintain the equipment specified in sub-regulation 121.05.3."

Amendment of regulation 127.02.1 of Part 127 of the Regulations:

41. Regulation 127.02.1 of the Regulations is herewith amended by –

- (a) the substitution for sub-regulation (8) of the following sub-regulation:
- (8) A helicopter referred to in sub-regulation (7) may be operated by a single pilot in VMC by night if the following requirements are complied with:
- (a) The helicopter shall be certificated and equipped for single-pilot night operations;
 - (b) The operator shall include in the operations manual, referred to in regulation 127.04.2, a recurrent training programme for pilots, which includes the additional requirements for single-pilot night VFR operations;

- (c) The cockpit procedures shall include –
- (i) use of night flying equipment, including lights and lighting;
 - (ii) use of normal, abnormal and emergency checklist;
 - (iii) departure and approach procedures;
 - (iv) simplified in-flight documentation; and
 - (v) if applicable, stability augmentation or automatic flight control system management.
- (d) The recurrent checks prescribed in subpart 3 shall be performed at night in the single-pilot role in an environment suitable for the type of operation involved ;
- (e) The pilot concerned shall have a minimum of 50 hours of flight time on the specific type of helicopter, of which 10 hours shall be as pilot-in-command;
- (9) The pilot concerned shall during the ninety days immediately preceding the intended flight have –
- (i) executed, by night, not less than three circuits (including take-off and landing); or
 - (ii) passed the appropriate skill test or proficiency check prescribed in Part 61 for the helicopter night rating in the type of helicopter in which the intended flight is to be undertaken.
- (g) If the helicopter has not been fitted with a stability augmentation system or automatic flight control system, night flight time shall be limited to two periods of maximum *two* continuous hours, with a rest period of at least half an hour in between.”.
- (b) the insertion after sub-regulation (8) of the following sub-regulations:
- “(8A) A helicopter, referred to in sub-regulation (7), may be operated by a single pilot in IMC if the following requirements are complied with:
- i. the helicopter shall be certificated and equipped for single-pilot IFR operations, as prescribed by regulation 127.05.3;
 - (b) the operator has included in the operations manual, referred to in Regulation 127.04.2, an approved conversion and recurrent training programme for pilots, which includes the additional requirements for a single-pilot IMC operation, as prescribed by regulation 127.03.3;
 - (c) the cockpit procedures shall include –
 - (i) use of normal, abnormal and emergency checklist;

- (ii) operation with partial instrument panel;
 - (iii) departure and approach procedures;
 - (iv) stability augmentation or automatic flight control system management; and
 - (v) simplified in-flight documentation.
- (d) the recurrent checks prescribed in Subpart 3 shall be performed in the single-pilot role in an environment representative of the operation;
- (e) the pilot concerned shall be the holder of a valid instrument rating for helicopters and have completed, in helicopters, not less than 1 000 hours of flight time, of which –
- (i) 250 hours shall be as pilot-in-command, or not less than 100 hours as pilot-in-command and the necessary additional flight time as co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command;
 - (ii) 200 hours shall be cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as co-pilot performing, under the supervision of the pilot-in-command, the duties and functions of a pilot-in-command;
 - (iii) 30 hours shall be simulated or actual instrument time, of which not more than 10 hours may have been acquired in a simulator approved for the purpose;
- (f) the pilot concerned shall during the ninety days immediately preceding the intended flight have –
- (i) executed at least three approaches, either under actual or simulated conditions with reference to flight instruments only; or
 - (ii) passed the appropriate skill test or proficiency check for the helicopter instrument rating as prescribed in Part 61,; in the type of helicopter in which the intended flights to be undertaken;
- (g) if the helicopter has been equipped with a stability augmentation system only rather than with an automatic flight control system, instrument flight time shall be limited to periods of maximum two continuous hours with either a rest period or flight in VMC by day of at least half an hour between such periods.

- (86) Notwithstanding the provisions of sub-regulation (8A), no person may operate a helicopter in a Category II or Category III approach and landing operation unless the flight crew includes a properly rated second pilot.
- (8C) Nothing in this regulation shall be construed as meaning that a flight under IFR or at night for the purpose of flight instruction conducted by an appropriately rated flight instructor would be a single-pilot operation, or that such a training flight, if conducted in terms of Part 127 would require to be operated by *two* qualified pilots.”.

Amendment of regulation 127.03.3 of Part 127 of the Regulations

42. Regulation 127.03.3 of the Regulations is herewith amended by the insertion of the following sub-regulation after sub-regulation (5):

“(6) The operator of a commercial air transport helicopter to be operated by a single pilot in terms of regulation 127.02.1(8) or 127.02.1(8A), shall ensure that additional crew training is provided as prescribed in Document SA-CATS-OPS 127.”.

Amendment of regulation 127.05.3 of Part 127 of the Regulations

43. Regulation 127.05.3 of the Regulations is herewith amended by-

- (a) the insertion after sub-regulation (1) of the following sub-regulation:

“(1A) The operator of a commercial air transport helicopter shall not operate the helicopter in IMC while carrying passengers, unless such helicopter is equipped with ---

- (a) a power-failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source;
- (b) two independent sources of energy (with means of selecting either), of which at least one is an engine-driven pump or generator, which are both able to drive all required gyroscopic instruments powered by, or to be powered by, that particular source, and installed in such a manner that failure of one instrument or source does not interfere with the energy supply, to the remaining instruments or the other energy source except where the rate-of-turn indicator of a single-engine helicopter involved in all-cargo operations only, has a source of energy separate from the bank and pitch and direction indicators. For the purpose of this sub-regulation, each engine-driven source of energy of a multi-engine helicopter must be on a different engine;

- (c) if a multi-engine helicopter, at least *two* generators or alternators of which any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the helicopter (both units may be mounted on the main rotor drive train); or
- (d) if a single-engine helicopter:
 - (i) two independent electrical power-generating sources, each of which is able to supply all probable combinations of continuous in-flight electrical loads for required instruments or equipment; or
 - (ii) in addition to the primary electrical power-generating source, a stand-by battery or an alternate source of electrical power that is capable of supplying 150% of the electrical loads of all required instruments and equipment necessary for safe emergency operation of the helicopter for at least 30 minutes;

Note: For the purpose of subparagraph (d)(i), a continuous in-flight electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.

- (e) either airborne weather radar equipment or other equipment, approved by the Commissioner, capable of detecting thunderstorms and other potentially hazardous weather conditions.

and

- (b) the insertion of the following sub-regulation after sub-regulation (4):

(5) When a commercial air transport helicopter is operated with a single pilot in terms of sub-regulation 127.02.1(8) while carrying passengers at night or in IMC, the helicopter shall furthermore be equipped with –

- (a) IFR-approved area navigation equipment that provides immediate identification and heading to the nearest suitable diversion;
- (b) an approved stability augmentation or automatic flight control management system; and
- (c) if the helicopter is fitted with a turbo engine–

- (i) an auto-ignition system or use of continuous ignition during take-off, landing and flight during heavy precipitation; and
- (ii) a manual throttle that bypasses the governing section of the fuel control unit, and permits continued unrestricted operation of the engine in the event of a fuel control unit failure.”.

Amendment of regulation 127.08.13 of Part 127 of the Regulations

44. Regulation 127.08.13 of the Regulations is herewith amended by the insertion of the following sub-regulation after sub-regulation (2):

“(3) The operator of a Class 3 helicopter, carrying passengers, shall not operate such helicopter under IMC or above more than three eighths of clouds within a radius of five nautical miles of the helicopter, unless the latest weather reports or forecasts, or any combination of them, indicate that the weather along the planned route (including take-off and landing), with due regard for the provision of regulation 127.08.15, allows flight under VFR under the ceiling (if a ceiling exists) at prescribed minimum heights established in terms of regulation 127.07.6, and that the weather is forecast to remain so until at least one hour after the estimated time of arrival at the destination.”.

Amendment of regulation 127.09.2 of Part 127 of the Regulations

45. Regulation 127.09.2 of the Regulations is herewith amended by the insertion of the following sub-regulations after sub-regulation (4);

- “(5) The operator of a commercial air transport Class C helicopter, to be operated at night or in IMC while carrying passengers, shall include in the schedule, referred to in sub-regulation (1) –
- (a) either the manufacturer’s recommended engine trend monitoring programme, which includes an oil analysis, if appropriate; or
 - (b) an engine trend monitoring programme, approved by the Commissioner, that includes an oil analysis at each 100 hours interval or at the manufacturer’s suggested interval, whichever is more frequent.
- (6) The results of each test, observation, and inspection, required by the applicable engine trend monitoring programme prescribed by sub-regulation (5) shall be recorded and maintained in the engine maintenance records.
- (7) The schedule shall contain, in respect of any helicopter referred to in sub-regulation (5), written maintenance instructions containing the methods, techniques, and practices necessary to maintain the equipment specified in regulation 127.05.3.”.

Amendment of regulation 135.03.3 of Part 135 of the Regulations

46. Regulation 135.03.3 is herewith amended by the addition of the following sub-regulation after sub-regulation (5):

"(6) The operator of a small commercial air transport aeroplane to be operated by a single pilot in terms of Regulations 135.02.6 shall ensure that the additional crew training is provided, as prescribed in Document SA-CATS-OPS 135."

Amendment of Regulation 135.03.5 of Part 135 of the Regulations

47. Regulation 135.03.5 of the Regulations is herewith amended by the deletion of sub-regulation (2).

Amendment of regulation 135.05.3 of Part 135 of the Regulations

48. Regulation 135.05.3 of the Regulations is herewith amended by-

(a) the insertion after sub-regulation (1) of the following sub-regulation:

"(1A) The operator of a small commercial air transport aeroplane shall not operate the aeroplane in IMC while carrying passengers, unless such aeroplane is equipped with ---

(a) a power-failure warning device or vacuum indicator to show the power available for gyroscopic instruments from each power source;

(b) two independent sources of energy (with means of selecting either), of which at least one is an engine-driven pump or generator, which are both able to drive all required gyroscopic instruments powered by, or to be powered by, that particular source, and installed in such a manner that failure of one instrument or source does not interfere with the energy supply, to the remaining instruments or the other energy source except where the rate-of-turn indicator of a single-engine helicopter involved in all-cargo operations only, has a source of energy separate from the bank and pitch and direction indicators. For the purpose of this sub-regulation,, each engine-driven source of energy of a multi-engine helicopter must be on a different engine;

(c) if a multi-engined aeroplane, at least two generators or alternators, each of which is on a separate engine, of which

any combination of one-half of the total number are rated sufficiently to supply the electrical loads of all required instruments and equipment necessary for safe emergency operation of the aeroplane; or

- (d) if a single-engined aeroplane
 - (i) two independent electrical power-generating sources, each of which is able to supply all probable combinations of continuous in-flight electrical loads for required instruments or equipment; and
 - (ii) a stand-by battery or an alternate source of electrical power that is capable of supplying 150% of the electrical loads of all required instruments and equipment necessary for safe emergency operation of the aeroplane for at least one hour;

Note: For the purpose of subparagraph (i), a continuous in-flight electrical load includes one that draws current continuously during flight, such as radio equipment, electrically driven instruments, and lights, but does not include occasional intermittent loads.

- (e) if a non-pressurised aeroplane, either airborne weather radar equipment or other equipment, approved by the Commissioner, capable of detecting thunderstorms and other potentially hazardous weather conditions."

and

- (b) the addition of the following sub-regulation after sub-regulation (2):

"(3) In the case of a Performance Class D aeroplane, operated with a single pilot in terms of sub regulation 135.02.1(6) while carrying passengers at night or in IMC, the aeroplane shall furthermore be equipped with –

- (d) IFR-approved area navigation equipment that provides immediate identification and heading to the nearest suitable aerodrome;
 - (e) an approved operative auto-pilot system, capable of operating the aircraft controls to maintain flight and manoeuvre it about the three axis; and
- (c) if the aeroplane is fitted with a turbo engine–
 - (i) an auto-ignition system or use of continuous ignition during take-off, landing and flight during heavy precipitation; and

- (ii) a manual throttle that bypasses the governing section of the fuel control unit, and permits continued unrestricted operation of the engine in the event of a fuel control unit failure.”

Amendment of Regulation 135.08.17 of Part 135 of the Regulations

- 49.** Regulation 135.08.17 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

“General

- 135.08.17(1)** The regulations in this Division shall apply to-

- (a) the operator of a Class B aeroplane that does not comply with the performance operating instructions prescribed in Division two; and
 - (b) the operator of a Class D aeroplane.
- (2) Notwithstanding the provisions of sub-regulation (1), an operator who operates such aeroplane at the time this amended regulation comes into operation, under performance operating limitations approved by the Commissioner in the past, may continue to do so. Such performance operating limitations need not to be more restrictive than those prescribed in this Division.
- (3) The operator of an aeroplane referred to in sub-regulation (1) shall not use such aeroplane for the provision of any scheduled public air service, unless a Class B or Class C aeroplane is available as a back-up in case the provisions of sub regulation (4) cannot be met.
- (4) The operator of an aeroplane referred to in sub-regulation (1), carrying passengers, shall not operate such aeroplane under IMC or above more than three eighths of clouds within a radius of five nautical miles of the aeroplane, unless the latest weather reports or forecasts, or any combination of them, indicate that the weather along the planned route (including take-off and landing), with due regard for the provisions of regulation 135.08.20, allows flight under VFR under the ceiling (if a ceiling exists) at prescribed minimum heights established in terms of regulation 135.07.6 and that the weather is forecast to remain so until at least one hour after the estimated time of arrival at the destination;”

Amendment of regulation 135.09.2 of Part 135 of the Regulations

- 50.** Regulation 135.09.2 of the Regulations is herewith amended by the insertion of the following sub-regulations after sub-regulation (4):

- "(5) The operator of an aeroplane referred to in regulation 135.08.17(1), to be operated by a single pilot in terms of sub-Regulation 135.02.1(6), shall include in the schedule, referred to in sub-regulation (1) –
- (a) either the manufacturer's recommended engine trend monitoring programme, which includes an oil analysis, if appropriate; or
 - (b) an engine trend monitoring programme, approved by the Commissioner, that includes an oil analysis at each 100 hours interval or at the manufacturer's suggested interval, whichever is more frequent.
- "(6) The results of each test, observation, and inspection, required by the applicable engine trend monitoring programme prescribed by sub-regulation (5) shall be recorded and maintained in the engine maintenance records;
- "(7) The schedule shall contain, in respect of any aeroplane referred to in sub-regulation (5), written maintenance instructions containing the methods, techniques, and practices necessary to maintain the equipment specified in regulation 135.03.3."

Amendment of Regulation 138.01.2 of Part 138 of the Regulations

51. Regulation 138.01.2 of the Regulations is herewith amended by--

- (a) the deletion of the number "(1)" preceding the text of the said regulation;
- (b) the deletion of the full stop at the end of paragraph (b) and replacing it with a semi-colon;
- (c) the insertion of the word "or" after paragraph (b); and
- (d) the insertion after paragraph (b) of the following paragraph:
- "(e) In the case of a foreign-registered aircraft, a foreign operator's permit issued in terms of the International Air Services Act, 1993 (Act No. 60 of 1993)."

Amendment of regulation 139.02.18 of Part 139 of the Regulations

52. Regulation 139.02.18 of Part 139 of the Regulations is herewith amended by-

- (a) the deletion of sub-paragraphs (ii), (iii), (iv) and (v) of paragraph (b) of sub-regulation (2); and
- (b) by inserting the word "and" at the end of subparagraph (i);

Amendment of Regulation 139.02.19 of Part 139 of the Regulations

53. Regulation 139.02.19 of the Regulations is herewith amended by –

- (a) the addition of the following paragraph after paragraph (d) of sub-regulation (2):

“(e)(i) Where an air traffic service unit is present on the aerodrome or where scheduled commercial operations are conducted, or where unscheduled commercial operations exceeding 6 movements a week are conducted and the maximum certificated mass of the aeroplanes involved exceeds 5700 kilograms, sensing equipment will be installed to technical specifications as per Document SA-CATS- AH to provide data to the air traffic service, the specifications of which are mentioned in Document **SA-CATS AH**.

- (i) such data must be displayed in the aerodrome control tower or air traffic service unit and the aeronautical meteorological station where applicable;
- (ii) where an air traffic service unit is not in operation and where scheduled commercial operations occur, such data shall be transmitted automatically to a minimum range of 5nm from the aerodrome reference point.”
- (iii) all licensed aerodromes supporting pilot training operations shall make wind direction, speed, surface air temperature and barometric pressure data available at a location accessible to pilots prior to take off;
- (iv) if the aerodrome is used for flights coming from outside the borders of the Republic or for flights departing to a destination outside the Republic, it has to ensure that satisfactory office facilities are available for an aeronautical meteorological station”.
and

- (c) the addition of the following paragraph after paragraph (d) of sub-regulation (3)

“(e) furnish in writing to the Commissioner as soon as practically possible, but within thirty days from the day of engagement, employment or contracting, the accountable manager and compliance officer referred to in regulation 139.02.5(1)(a), with that person’s full particulars.”

Amendment of regulation 139.02.31 of Part 139 of the Regulations

54. Regulation 139.02.31 of the Regulations is herewith amended by-

- (a) the substitution of sub-regulation (2) with the following sub-regulation:
- “(2) If, after the expiry of the period of notice referred to in sub-regulation (1), an aerodrome is abandoned or is not being maintained in accordance with the conditions of the licence, the holder of the licence shall remove, obliterate or modify all aerodrome markings as the Commissioner may direct.” and
- (b) the addition of the following sub-regulation after sub-regulation (2):
- “(3) On completion of the task, referred to in sub-regulation (2), the holder shall surrender the licence to the Commissioner,”

Amendment of regulation 139.03.18 of Part 139 of the Regulations

55. Regulation 139.03.18 of the Regulations is herewith amended by-

- (a) the deletion of paragraphs (ii), (iii), (iv) and (v) of paragraph (b) of sub-regulation (2); and
- (b) by inserting the word “and” at the end of paragraph (i);

Amendment of regulation 139.03.30 of Part 139 of the Regulations

56. Regulation 139.03.30 of the Regulations is herewith amended by

- (a) the substitution for sub-regulation (2) of the following sub-regulation:
- “(2) If, after the expiry of the period of notice referred to in sub-regulation (1), a heliport is abandoned or is not being maintained in accordance with the conditions of the licence, the holder of the licence shall remove, obliterate or modify all heliport markings as the Commissioner may direct.”
- and
- (b) the addition of the following sub-regulation after sub-regulation (2)
- “(3) On completion of the task referred to in sub-regulation (2), the holder shall surrender the licence to the Commissioner.”

Amendment of regulation 145.02.13 of Part 145 of the Regulations

57. Regulation 145.02.13 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

- “(2) The holder of an approval with a Category A rating shall ensure that –

- (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and
- (b) all personnel who are authorised to issue on behalf of the aircraft maintenance organization certificates of release to service and certificates relating to the maintenance of an aircraft, are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organization's manual of procedure in accordance with regulation 43.03.1(1)(b)."

Amendment of regulation 145.03.13 of Part 145 of the Regulations

58. Regulation 145.03.13 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

"(2) The holder of an approval with a Category B rating shall ensure that-

- (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and
- (b) all personnel who are authorised to issue on behalf of the aircraft maintenance organization certificates of release to service and certificates relating to the maintenance of an aircraft are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with the appropriate rating, as provided for in the organization's manual of procedure in accordance with regulation 43.03. 1 (1) (b)."

Amendment of Regulation 145.04.13 of Part 145 of the Regulations

59. Regulation 145.04.13 is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

"(2) The holder of an approval with a Category C rating shall ensure that-

- (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and
- (b) all personnel who are authorised to issue on behalf of the aircraft maintenance organization certificates of release of service and certificates relating to the maintenance of an aircraft,

are appropriately licensed and rated in terms of Part 66 or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organization's manual of procedure in accordance with regulation 43.03.1(1)(b)."

Amendment of regulation 145.05.13 of Part 145 of the Regulations

60. Regulation 145.05.13 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

- “(2) The holder of an approval with a Category **D** rating shall ensure that-
- (a) all persons who are directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and
 - (b) all personnel who are authorized to issue on behalf of the aircraft maintenance organization certificates of release to service and certificates relating to the maintenance of an aircraft, are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organization’s manual of procedure in accordance with regulation 43.03.1(1)(b).”.

Amendment of Regulation 145.06.13 of Part 145 of the Regulations

61. Regulation 145.06.13 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

- “(2) The holder of an approval with a Category **E** rating shall ensure that-
- (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and
 - (b) all personnel who are authorised to issue on behalf of the aircraft maintenance organization certificates of release to service and certificates relating to the maintenance of an aircraft, are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organization’s manual of procedure in accordance with regulation 43.03.1(1)(b).”.

Amendment of regulation 145.07.13 of Part 145 of the Regulations

62. Regulation 145.07.13 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

- “(2) The holder of an approval with a Category **W** rating shall ensure that-
- (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and

- (b) all personnel who are authorised to issue on behalf of the aircraft maintenance organization certificates of release to service and certificates relating to the maintenance of an aircraft; are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for the in the organization's manual of procedure in accordance with regulation 43.03.1(1)(b)."

Amendment of regulation 145.08.13 of Part 145 of the Regulations

63. Regulation 145.08.13 of the Regulations is herewith amended by the substitution for sub-regulation (2) of the following sub-regulation:

- (2) The holder of an approval with a Category X rating shall ensure that-
 - (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the aircraft maintenance organization; and
 - (b) all personnel who are authorised to issue on behalf of the aircraft maintenance organization certificates of release to service and certificates relating to the maintenance of an aircraft, are appropriately licensed and rated in terms of Part 66, or have been issued by him or her with a certification authorisation with the appropriate rating, as provided for in the organization's manual of procedure in accordance with regulation 43.03.1(1)(b)."

Amendment of Part 148 of the Regulations

64. The following Part is herewith substituted for Part 148 of the Regulations:

PART 148

MANUFACTURING ORGANISATIONS

LIST OF REGULATIONS

SUBPART 1: GENERAL

- 148.01.1 Applicability
- 148.01.2 Eligibility
- 148.01.3 Display of manufacturing organisation approval
- 148.01.4 Advertisements

- 148.01.5 Safety inspections and audits
- 148.01.6 Suspension and cancellation of manufacturing organisation approval and appeal
- 148.01.7 Ratings
- 148.01.8 Register of approvals

SUBPART 2: APPROVAL OF MANUFACTURING ORGANISATION

- 148.02.1 Approval requirements
- 148.02.2 Application
- 148.02.3 Issue of Approval
- 148.02.4 Quality System
- 148.02.5 Manual of Procedures
- 148.02.6 Changes to the Organisation
- 148.02.7 Changes in Location
- 148.02.8 Transferability
- 148.02.9 Terms of Approval
- 148.02.10 Changes to the Terms of Approval
- 148.02.11 Period of validity
- 148.02.12 Privileges
- 148.02.13 Duties of holder of Approval
- 148.02.14 Annual declaration and currency fee

SUBPART 1

GENERAL

Applicability

148.01.1 (1) This Part shall apply to the approval and operation of manufacturing organisations that –

- (a) manufacture specified products, parts or appliances;
- (b) apply specified processes to products, parts or appliances; or
- (c) carry out specified tests on products, parts or appliances.

(2) This Part also prescribes rules governing the holders of such approvals for showing conformity of products, parts or appliances with the applicable approved data.

Eligibility

148.01.2 The Commissioner shall accept an application for a manufacturing organisation approval if –

- (a) he or she agrees that for a defined scope of work, such an approval is appropriate for the purpose of showing conformity with a specific design; and
- (b) the applicant –
 - (i) holds, or has applied for, an approval of such a design; or
 - (ii) has a suitable arrangement with a holder of, or an applicant for, an approval of such a design; that ensures satisfactory co-ordination between production and design.

Display of manufacturing organization approval

148.01.3 The holder of a manufacturing organisation approval shall display the approval in a prominent place at such holder's principal place of business, generally accessible to the public, and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

Advertisements

148.01.4 Any advertisement by an organisation, indicating that it is a manufacturing organisation, shall reflect the number of the manufacturing organisation approval issued by the Commissioner.

Safety Inspections and audits

- 148.01.5 (1) An applicant for the issuing of a manufacturing organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits as may be necessary to verify the validity of any application made in terms of regulation 148.02.2.
- (2) The holder of a manufacturing organisation approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part,
 - (3) Inspection and-audit fees, as prescribed in Part 187, shall be payable in respect of the inspections referred to in sub-regulation (1), and for any inspection considered necessary by the Commissioner in order to adjudicate on the suspension as referred to in regulation 148.01.6.

Suspension and cancellation of manufacturing organization approval and appeal

- 148.01.6** (1) An authorised officer, inspector or authorised person may suspend, for a period not exceeding thirty (30) days, the holder of a manufacturing organisation approval issued under this Part from exercising all or any of the privileges of such approval, if –
- (a) after a safety inspection and audit, carried out in terms of regulations 148.01.5, it is evident that the holder of the approval does not comply with the requirements prescribed in this Part, and such holder fails to remedy such non-compliance within thirty (30) days after receiving notice to do so, in writing from the authorised officer, inspector or authorised person; or
 - (b) the authorised officer, inspector or authorised person is prevented by the holder of the approval, or any of its partners or subcontractors, to carry out a safety inspection and audit in terms of regulations 148.01.5; or
 - (c) the suspension is necessary in the interests of aviation safety.
- (2) The notice of suspension shall be given in writing, stating the reasons for the suspension.
- (3) A person who has been suspended from exercising all or any of the privileges of his or her manufacturing organization approval in terms of sub-regulation (1) shall be afforded an opportunity to make representations against such suspension within a maximum period of seven days after such suspension, which representations shall be considered by the authorised officer, inspector or authorised person making the suspension, who may either confirm, vary or set aside the suspension.
- (4) Should no representations be received in terms of sub-regulation (3), or should the authorized officer, inspector or authorised person making the suspension either confirm or vary the suspension after receipt of representations, such authorised officer, inspector or authorised person shall within a period of seven days after the period, referred to in sub-regulation (3), deliver a report in writing to the Commissioner, stating the reasons why, in his or her opinion, the suspended privileges should be withdrawn or the approval should be cancelled.
- (5) The authorized officer, inspector or authorised person concerned shall within seven days submit a copy of the report, referred to in sub-regulation (4), to the holder of the manufacturing organization approval of which all or some of the privileges have been suspended, and shall furnish proof of such submission to the Commissioner.
- (6) The holder of an approval who feels aggrieved by any suspension in terms of sub-regulation (1) may appeal against such suspension to the commissioner within thirty (30) days after such holder has been notified in terms of sub-regulation (2) of the suspension.
- (7) The appeal, referred to in sub-regulation (6), shall be in writing, stating the reasons why, in the appellant's opinion, the suspension should be varied or set aside.

- (8) The appellant shall submit a copy of the appeal, and any documents or records supporting such appeal, to the authorised officer, inspector or authorised person concerned, and shall furnish proof of such submission to the Commissioner.
- (9) The authorised officer, inspector or authorised person concerned shall, within seven days of receipt of the copy of the appeal referred to in sub-regulation (8), deliver his or her written reply to such appeal to the Commissioner.
- (10) The Commissioner may -
- (a) at any time -
 - (i) extend the period of suspension for a further period of thirty (30) days, should the interests of fairness or aviation safety so require; and
 - (ii) either confirm, vary or set aside the suspension referred to in sub-regulation (1), and impose any conditions necessary for the varying or setting aside of such suspension; and
 - (b) adjudicate the appeal on the basis of the documents submitted to him or her; or
 - (c) order the appellant and the authorised officer, inspector or authorised person concerned to appear before him or her to give evidence, either in person or through a representative, at a time and place determined by him or her.
- (11) Before the Commissioner withdraws any privileges of, or cancel the approval, in terms of sub-regulation (10), he or she shall permit the holder, if he or she so wishes, to meet the relevant requirements for the issue, renewal or re-issue of the said maintenance organization approval in order to restore the privileges thereof.
- (12) With due regard for the provisions of sub-regulation (11), the Commissioner shall withdraw the privileges of, or cancel, the maintenance organization approval concerned if -
- (a) he or she confirms the suspension in terms of sub-regulation (10)(a)(ii); or
 - (b) the holder does not appeal against such suspension in terms of sub-regulation (6).

Ratings

148.01.7 The ratings for a manufacturing organisation approval are -

- (a) an M rating, to manufacture specified products, parts or appliances;
- (b) a P rating, to apply specified processes to products, parts or appliances; and

- (c) a T rating, to carry out specified tests on products, parts or appliances.

Register of approvals

148.01.8 (1) The Commissioner shall maintain a register of all manufacturing organisation approvals issued in terms of this Part.

- (2) The register shall contain the following particulars:
 - (a) full names of the holder of the approval;
 - (b) postal address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the rating issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars, referred to in sub-regulation (2), shall be recorded in the register within seven days from the date on which the approval is issued by the Commissioner.
- (4) The register shall be kept in a safe place at the office of the Commissioner.
- (5) A copy of the register shall be furnished by the Commissioner, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

SUBPART 2

APPROVAL OF MANUFACTURING ORGANISATION

Approval requirements

148.02.1 The applicant for a manufacturing organisation approval must show, on the basis of the information submitted in the manual of procedures, requested in terms of regulation 148.02.5, that he or she meets the following requirements:

(a) **General:**

The facilities, working conditions, equipment and tools, processes and associated materials, personnel numbers and competence, and general organisation have to be of such a nature as to ensure that manufacturing organisations are able to discharge the responsibilities in terms of regulation 148.02.13.

(b) Data:

(i) The manufacturing organisation -

(aa) is in receipt of all approved data from the Commissioner and from the holder of, or an applicant for, the approval of the type design, as appropriate, to determine conformity with the applicable design data; and

(bb) has a procedure to ensure that approved data are correctly incorporated in its production data;

(ii) keeps above data up to date and has made it available to all personnel who need access to such data to perform their duties.

(c) Organization:

(i) A manager, accountable to the Commissioner, has been nominated; with responsibility within the organization to ensure that all production is performed to the required standards and that the production organization is continuously in compliance with the data and procedures identified in the manual of procedures.

(ii) A manager or group of managers has been nominated to ensure that the organization is in compliance with the requirements of this Subpart, and who has or have been identified together with the extent of his, her or their authority. In this respect, such person or persons must be directly responsible to the manager identified in sub-paragraph (i) of this paragraph.

(iii) Staff at all levels have been given appropriate authority to be able to discharge their allocated responsibilities with full and effective co-ordination within the production organization in respect of airworthiness matters.

(d) Certifying staff:

(i) Certifying staff is defined as those personnel who are authorised by the manufacturing organisation to sign the documents issued under the scope or terms of its approval.

The knowledge, background (including other functions in the organisation), and experience of the certifying staff shall be appropriate to discharge their allocated responsibilities.

- (ii) The manufacturing organisation maintains a record of all certifying staff that shall include details of the scope of their authorisation.
- (iii) Certifying staff is provided with evidence of the scope of their authorisation.

Application

148.02.2 An application for the issuing, renewal or amendment of a manufacturing organisation approval shall:

- (a) be made to the Commissioner in the appropriate form as prescribed in document SA-CATS-MORG and shall include –
 - (i) an outline of the information required by regulation 148.02.5;
 - (ii) the terms of approval requested to be issued under regulation 148.02.9;and
- (b) be accompanied by the appropriate fee as prescribed In Part 187.

Issuing of Approval

148.02.3(1) The Commissioner shall issue a manufacturing organisation approval if the applicant complies with the requirements of regulation 148.02.1.

- 2) The approval with the relevant rating shall be issued on the appropriate form as prescribed in document SA-CATS-MORG.

Quality System

148.02.4 (1) The manufacturing organisation shall show that it has established and can maintain a quality system, which has to be documented.

- (2) This quality system shall be such as to enable the organisation to ensure that –
 - (a) in the case of an approval with an M rating, each product, part or appliance produced by the organisation or by its partners, or supplied from or subcontracted to outside parties, conforms to the applicable design data and is in a condition for safe operation;

- (b) in the case of an approval with a P rating, the processing of products, parts or appliances is controlled and supervised to ensure conformation with the conditions of the approval; and
 - (c) in the case of an approval with a T rating, the testing of products, parts or appliances is controlled and supervised to ensure conformation with the conditions of the approval; and thus may exercise the privileges set forth in regulation 148.02.12.
- (2) The quality system shall include, as applicable within the scope of approval, control procedures for those elements shown in document SA-CATS-MORG.

Manual of procedure

148.02.5 (I) An applicant for the issuing of a manufacturing organisation approval shall provide the Commissioner with his or her manual of procedure, which shall:

- (a) comply with the requirements prescribed in this Subpart;
- (b) contain the information prescribed in Document SA-CATS-MORG; and
- (c) be amended, as necessary to remain an up-to-date description of the organisation. Two copies of amendments shall be supplied to the Commissioner.

Changes to the Organisation

148.02.6 (1) If the holder of a manufacturing organisation approval desires to make any change to the organisation, which is significant to the showing of compliance with the appropriate requirements prescribed in this Subpart, such holder shall apply to the Commissioner for the approval of such change.

- (2) The provisions of regulation 148.02.2 shall apply *mutatis mutandis* to an application for the approval of a change to the organisation.
- (3) An approval of a change to the organisation shall be granted by the Commissioner if the applicant satisfies the Commissioner, upon submission of appropriate proposed changes to its manual of procedure that he or she will continue to comply with the provisions of regulation 148.02.1 after the implementation of such approved change.

Changes in location

148.02.7A a change in the location of the manufacturing, processing or testing facilities of the approved manufacturing organisation shall be regarded as a change of significance to the organisation which shall, therefore, comply with the provisions of regulation 148.02.6.

Transferability

148.02.8 (1) Subject to the provisions of sub-regulation (2), a manufacturing organisation approval shall not be transferable.

(2) A change in ownership of the holder of an approval shall be deemed to be a change of significance to the organisation, referred to in regulation 148.02.6.

Terms of Approval

148.02.9 The terms of approval shall:

- (a) be issued as part of the manufacturing organisation approval;
- (b) specify the rating(s) relevant for the activity of the organisation; and
- (c) specify the products or the categories of parts and appliances to be manufactured, processed or tested.

Changes to the terms of approval

148.02.10 (1) Application for a change to the terms of approval –

- (a) shall be made in a manner acceptable to the Commissioner, as prescribed in document SA-CATS-MORG; and
- (b) be accompanied by the appropriate fee as prescribed in Part 187.

(2) The applicant shall comply with the provisions of regulations 148.02.5 and 148.02.6.

Period of validity

148.02.11 (1) A manufacturing organisation approval shall be issued for an unlimited duration. It shall remain valid unless --

- (a) the manufacturing organisation fails to demonstrate compliance with the applicable requirements of this Part; or
- (b) it is suspended by an authorised officer, inspector, or authorised person, or cancelled by the Commissioner in terms of regulation 148.01.6; or

- (c) there is evidence that the manufacturing organisation cannot maintain satisfactory control of the manufacture, processing or testing of products, parts or appliances under the approval; or
 - (d) the manufacturing organisation no longer meets the requirements of regulation 148.02.1; or the approval certificate has been revoked in terms of regulation 148.01.6(12).
- (2) The holder of an approval that is suspended shall forthwith produce the approval upon suspension thereof to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (3) The holder of an approval that is revoked shall, within thirty (30) days from the date on which the approval is revoked, surrender such approval to the Commissioner.

Privileges

148.02.12 The holder of a manufacturing organisation approval may, within the terms of approval issued in accordance with regulation 148.02.9:

- (a) in the case of a manufacturing organisation with an M rating:
 - (i) in the case of a complete aircraft and upon presentation of an aircraft statement of conformity in the format as prescribed in Document SA-CATS-MORG, obtain a certificate of airworthiness (standard or export) without further showing;
 - (ii) in the case of any other Class I product and upon presentation of a statement of conformity in the format as prescribed in Document SA-CATS-MORG, obtain from the Commissioner an authorised release certificate without further showing;
 - (iii) in the case of products, parts or appliances, other than a Class I product, issue authorised release certificates in the format as prescribed in Document SA-CATS-MORG without further showing; and
 - (iv) carry out maintenance on a new aircraft produced by the organisation to the extent necessary to keep it in an airworthy condition, and that does not require an approval in terms of Part 145, and issue a certificate of release to service in respect of such maintenance in accordance with Part 43.
- (b) in the case of a manufacturing organisation with a P rating:
 - (i) apply the process or processes for which the organisation is rated in terms of regulation 148.02.9; and

- (ii) issue authorised release certificates without further showing.
- (c) in the case of a manufacturing organisation with a T rating:
 - (i) perform the tests on products, parts or appliances for which the organisation is rated in terms of regulation 148.02.9; and
 - (ii) issue authorised release certificates without further showing.

Duties of Approval holders

148.02.13 (1) The holder of a manufacturing organisation approval with an M rating shall:

- (a) ensure that the manufacturing organisation's manual of procedure, furnished in accordance with regulation 148.02.5 and the documents to which it refers, are used as the basic working documents within the organisation;
- (b) maintain the manufacturing organisation in conformity with the data and procedures approved for the manufacturing organisation approval;
- (c) determine that –
 - (i) each completed aircraft conforms to the type design and is in condition for safe operation prior to submitting statements of conformity to the Commissioner; or
 - (ii) other products, parts or appliances are complete and conform to the approved design data and are in condition for safe operation for the issuing of authorised release certificates to certify airworthiness or conformity, as applicable;
- (d) record all details of work carried out in a form acceptable to the Commissioner;
- (e) report to the holder of the type certificate or design approval all cases where products, parts or appliances have been released by the manufacturing organisation and subsequently identified to have deviations from the applicable design data, and investigate with the holder of the type certificate or design approval to identify those deviations that may lead to an unsafe condition;
- (f) provide assistance to the holder of the type certificate or design approval in dealing with any continuing airworthiness actions that are related to the products, parts or appliances that have been produced;
- (g) institute an archiving system incorporating requirements to its partners, suppliers and subcontractors, ensuring conservation of the data used to justify conformity of the products, parts or appliances, to be held at the disposal of

the Commissioner and be retained in order to provide the information necessary to ensure the continuing airworthiness of the products, parts or appliances; and

- (h) where under the terms of approval, a certificate of release to service is to be issued, determine that each completed aircraft has been subjected to necessary maintenance and is in a condition for safe operation, prior to the issuing of the certificate.
- (2) The holder of an organisation approval with a P rating shall:
- (a) ensure that the organisation's manual of procedure, furnished in accordance with regulation 148.02.5 and the documents to which it refers, are used as basic working documents within the organisation;
 - (b) maintain the organisation in conformity with the data and procedures approved for the manufacturing organisation;
 - (c) determine that each completed process conforms to the applicable approved data and that such process does not undermine operational safety prior to the issuance of authorised release documents to certify airworthiness or conformity, as applicable; and
 - (c) record all details of work carried out in a manner acceptable to the Commissioner.
- (3) The holder of a manufacturing organisation with a T rating shall:
- (a) ensure that the testing organisation's manual of procedure furnished in accordance with regulation 148.02.5 and the documents to which it refers, are used as the basic working documents within the organisation;
 - (b) maintain the testing organisation in conformity with the data and procedures approved for the testing organisation;
 - (c) determine that each tested product, part or appliance conforms to the type design and is in a condition for safe operation prior to submitting statements of conformity to the Commissioner or prior to issuing of authorised release certificates to certify airworthiness; and
 - (d) record all details of work carried in a manner acceptable to the Commissioner.

Annual declaration and currency fee

- 148.02.14** The holder of a manufacturing organisation approval shall, on the anniversary date of the issuing of the approval, or of the date of its reinstatement, as the case may be, submit to the Commissioner –

- (a) a signed statement that the organisation remains in compliance with all aspects of the terms of its approval, in the format as prescribed in Document SA-CATS-MORG; and
- (b) the currency fee prescribed in Part 187.

Amendment of regulation 172.01.3 of Part 172 of the Regulations

65. Regulation 172.01.3 of the Regulations is herewith amended by the addition of the following paragraph after paragraph (9):

“(g) aerodrome flight information service.”.

Repeal of Regulation 187.00.30 of the Civil Aviation Regulations, 1997

66. Regulation 187.00.30 of the Regulations is herewith repealed.

Short Title and Commencement

67.(1) This Amendment is called the Twenty –Third Amendment of the Civil Aviation Regulations, 1997, and will subject to the provisions of sub-regulation (2), come into operation on the date of publication thereof.

(2) Regulations 30, 36, and 51 will come into operation on 01 October 2006