

**DEPARTMENT OF TRANSPORT**

**NO. R. 432**

**19 MAY 2017**

**CIVIL AVIATION ACT, 2009 (ACT NO. 13 OF 2009)**

**SIXTEENTH AMENDMENT OF THE CIVIL AVIATION REGULATIONS, 2017**

I, Joe Maswanganyi, Minister of Transport hereby, in terms section 155(1) of the Civil Aviation Act, 2009, (Act No. 13 of 2009), make the Regulations set out in the Schedule hereunder.

**Mr Joe Maswanganyi, MP**  
**Minister of Transport**  
**Date:**

**SCHEDULE****CIVIL AVIATION ACT, 2009 (ACT NO.13 OF 2009)****SIXTEENTH AMENDMENT OF THE CIVIL AVIATION REGULATIONS, 2017****GENERAL EXPLANATORY NOTE:**

[            ] Words in bold type in square brackets indicate omissions from existing regulations.

\_\_\_\_\_ Words underlined with a solid line indicate insertions in existing regulations.

**Definition**

1. In this Schedule “the Regulations” means the Civil Aviation Regulations, 2011 published by Government Notice No. R. 425 dated 1 June 2012, as amended.

**Amendment of regulation 1.01.1 of the Regulations**

2. Regulation 1.01.1 is hereby amended by –

- (a) the insertion after the definition of “advisory area” of the following definition:

““advisory circular” means a publication issued by the Director that provides guidance for compliance with the Regulations;”;

- (b) the insertion after the definition of “aerodrome” of the following definition:

““aerodrome climatological summary” means a summary of specified meteorological elements at an aerodrome, based on statistical data;”;

- (c) the insertion after the definition of “aircraft stand taxi lane” of the following definition:

“**aircraft tracking**” means a process established by an air service operator, that maintains and updates, at standardized intervals, a ground-based record of four dimensional position or individual aircraft in flight;”;

- (d) the insertion after the definition of “designated flight examiner” of the following definition:

“**detect and avoid**” means the capability to see, sense or detect conflicting traffic or other hazards and take the appropriate action;”;

- (e) the insertion after the definition of “flight training device qualification certificate” of the following definition:

“**flight visibility**” means the visibility forward from the cockpit of aircraft in flight;”;

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

“**free balloon**” means a non-power-driven, lighter-than-air aircraft in free flight;”.

- (g) the insertion after the definition of “ICAO flight plan form” of the following definition:

“**IFR flight**” means a flight conducted in accordance with the instrument flight rules;”;

- (h) the insertion after the definition of “landing distance available” of the following definition:

“**landing surface**” means the part of the surface of an aerodrome which the aerodrome operator has declared available for the normal ground or water run of aircraft landing in a particular direction;”;

- (i) the insertion after the definition of “organisation” of the following definition:

“**ornithopter**” means a heavier than air aircraft supported in flight mainly by the reactions of the air on planes to which flapping motion is imparted;”;

- (j) the insertion after the definition of “payload” of the following definition:

“**performance-based communication**” means communication based on performance specifications applied to the provision of air traffic services;

*Note — An RCP specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.”;*

- (k) the insertion after the definition of “performance based navigation” of the following definition:

“**performance-based surveillance**” means surveillance based on performance specifications applied to the provision of air traffic services;

*Note — An RSP specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and associated data delivery time, continuity, availability, integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.”;*

- (l) the insertion after the definition of “power-assisted glider” of the following definition:

“**powerplant**” means a system consisting of the engine, drive system component (if applicable) and propeller (if installed), their accessories, ancillary parts, and fuel and oil systems installed on aircraft but excluding the rotors for a helicopter;”;

- (m) the insertion after the definition of “required navigation performance” of the following definition:

“**required surveillance performance specifications**” means a set of requirements for air traffic service provision and associated ground equipment, aircraft capability and operations needed to support performance-based surveillance;”;

- (n) the insertion after the definition of “rotorcraft flight manual” of the following definition:

“**RPA observer**” means a trained and competent person designated by the operator of an RPA who, by visual observation of the RPA, assists the remote pilot in the safe conduct of the flight;”;

- (o) the substitution for the definition of “runway” of the following definition:

**“runway”** means a defined rectangular area on a land aerodrome prepared for the landing and take-off of **[aeroplanes]** aircraft;”;

- (p) the insertion after the definition of “take-off run available” of the following definition:

**“take-off surface”** means the part of the surface of an aerodrome which the aerodrome operator has declared available for the normal ground or water run of aircraft taking off in a particular direction;”.

### Amendment of regulation 1.01.2 of the Regulations

3. Regulation 1.02.1 is hereby amended by –

- (a) the insertion after the abbreviation of “DTK” of the following abbreviation:

**“EDTO”** means extended diversion time operation;

- (b) the insertion after the abbreviation of “LNAV” of the following abbreviation:

**“LOC-I”** means loss of control in flight;

- (c) the insertion after the abbreviation of “IAWP” of the following abbreviation:

**“ICAO”** means International Civil Aviation Organization;

- (d) the insertion after the abbreviation of “PAR” of the following abbreviation:

**“PBC”** means performance-based communication;

- (e) the insertion after the abbreviation of “PBN” of the following abbreviation:

**“PBS”** means performance-based surveillance;

- (f) the insertion after the abbreviation of “RPS” of the following abbreviation:

**“RSP”** means required surveillance performance;

- (g) the insertion after the abbreviation of “TVE” of the following abbreviations:

“UPRT” means upset prevention and recovery training;

“VAAC” means volcanic ash advisory centre;

- (h) the insertion after the abbreviation of “VFR” of the following abbreviation:

“WAFIC” means world area forecast centre.”.

### **Amendment of Part 12 of the Regulations**

4. Part 12 of the Regulations is hereby amended by –

- (a) the substitution in regulation 12.01.6 for sub-regulation (1) of the following sub-regulation:

“(1) The Executive responsible for aircraft accident and incident investigation may –

- (a) designate an accredited representative, for the purposes of investigating an accident or incident involving a South African registered aircraft in a territory of **[a contracting or non-contracting]** another State; **[or]**
- (b) accept the accreditation or appointment of an accredited representative of the State of Registry, State of the Operator, State of Design, **[or]** State of Manufacture or a State which provides information, facilities or experts to the investigation for the purposes of participating in investigating an aircraft accident or incident **[involving a South African or a foreign registered aircraft]** in the territory of the Republic[.]; and
- (c) invite a State that provides an operational base for field investigation, is involved in search and rescue or wreckage recovery operations, or is involved as a State of a code-share or alliance partner of the air service operator, to appoint an accredited representative to participate in the investigation conducted in the Republic.”;

- (b) the insertion after regulation 12.02.5 of the following regulation:

#### **“Notification to other States and ICAO**

**12.02.6** (1) In the event that the Republic becomes a State of Occurrence, the Executive responsible for aircraft accident and incident investigation shall, without delay, send a notification of the accident or serious incident in the manner prescribed in Document SA-CATS 12 to –

- (a) the State of Registry;
- (b) the State of the Operator;
- (c) the State of Design;
- (d) the State of Manufacture; and
- (e) ICAO, when the aircraft involved is of a MCM in excess of 2 250 kg or is a turbojet-powered aeroplane.

(2) In the event that the Republic, as the State of Registry, institutes an investigation of an accident or serious incident, the Executive responsible for aircraft accident and incident investigation shall, without delay, send a notification of the accident or serious incident in the manner referred to in sub-regulation (1), to the States or organisation mentioned in paragraphs (b) to (e) of sub-regulation (1).

(3) In the event that the State of Occurrence is not aware of an accident or serious incident occurring in its territory, the Executive responsible for aircraft accident and incident investigation shall forward a notification received in terms of regulation 12.02.3 to the State of Design, the State of Manufacture and the State of Occurrence.”;

- (c) the substitution for regulation 12.03.3 of the following regulation:

**“12.03.3 (1)** Any item or wreckage of an aircraft involved in an accident or incident, or any part or component thereof, or anything transported therein, may be retained by the investigator-in-charge until no longer required for the purpose of an investigation, including an investigation following on a reopening referred to in regulation 12.05.3, or for an inquiry by a Commission of inquiry in terms of section 69 of the Act, whereupon such wreckage, or part or component thereof, shall be discarded or destroyed, unless a person having a right to such item, or part or component thereof, has informed the Executive Manager: Aircraft Accident and Incident Investigation in writing, within 60 days of the date of such accident or incident, that such item or component or part be returned to him or her after the completion of the investigation or inquiry.

(2) The Executive responsible for aircraft accident and incident investigation shall release custody of the aircraft, its contents or any parts thereof as soon as they are no longer required in the investigation, to any person or persons duly designated by the State of Registry or the State of the Operator.

(3) The Executive responsible for aircraft accident and incident investigation shall facilitate access by the person referred to in sub-regulation (2), to the aircraft, its contents or any parts thereof: Provided that, if the aircraft, its contents, or any parts thereof lie in an area which he or she finds it impracticable to access, he or she shall remove the aircraft to an accessible location.”;

- (d) the insertion after regulation 12.03.3 of the following regulations:

**“Accident or incident in territory of non-Contracting State or outside the territory of any State**

**12.03.4** (1) When an accident or serious incident as described in regulation 12.01.1(1)(b) or (c) has occurred –

- (a) in the territory of a non-Contracting State and such State does not intend to conduct an investigation in accordance with Annex 13, the Executive responsible for aircraft accident and incident investigation may institute an investigation of such accident or incident;
- (b) in a location which is not in the territory of any State, the Executive responsible for aircraft accident and incident investigation shall institute an investigation of such accident or serious incident.

**Request from State conducting investigation**

**12.03.5** (1) The Executive responsible for aircraft accident and incident investigation shall, on request from a State conducting an investigation of an aircraft accident or incident, provide that State with all the relevant information available to him or her.

(2) The Executive responsible for aircraft accident and incident investigation shall, on request from the State conducting the investigation, provide pertinent information on an organisation whose activities may have directly or indirectly influenced the operation of the aircraft.”;

- (e) the insertion in regulation 12.04.6 after sub-regulation (3) of the following sub-regulations:

“(4) The Executive responsible for aircraft accident and incident investigation shall determine whether any other records obtained or generated as part of an accident or incident investigation require protection in the same manner as the records mentioned in sub-regulation (1).

(5) Subject to regulation 12.04.7, a statement or information obtained from any person regarding aircraft accident and incident investigation shall not be used against the person who made it in any legal, disciplinary or other proceedings.

(6) The Executive responsible for aircraft accident and incident investigation shall ensure that requests for records in his or her custody or control are directed to the original source of the information.

(7) The Executive responsible for aircraft accident and incident investigation shall retain copies of records obtained in the course of an investigation for a period of not less than five years.

(8) The Executive responsible for aircraft accident and incident investigation shall take measures to ensure that audio content of cockpit voice recordings and image and audio content of airborne image recordings are not disclosed to the public.

(9) The Executive responsible for aircraft accident and incident investigation shall ensure that a draft final report issued or received in terms of this Part is not disclosed to the public.”;



- (f) the substitution in regulation 12.04.7 for the words preceding paragraph (a) of the following words:

**“12.04.7** Notwithstanding the provisions of regulation 12.04.6, an appropriate authority may authorise the use of the records referred to in regulation 12.04.6(1) except the records mentioned in **[paragraphs (d) and (f)] paragraph (a)**, thereof for internal proceedings when —”;

- (g) the substitution for regulation 12.05.1 of the following regulation:

**“Reporting**

**12.05.1 (1)** The investigator-in-charge shall, upon completion of an investigation of an accident or incident carried out in terms of Subpart 3, report the findings of such investigation to the Executive responsible for aircraft accident and incident investigation.

(2) The reporting **[on an investigation]** referred to in sub-regulation (1) shall consist of —

- (a) a preliminary report **[, if necessary in the interests of aviation safety]** issued not later than 30 days after the occurrence and which shall, in the case of an investigation involving an aircraft of a MCM in excess of 2 250 kg, be sent to ICAO, the State of Registry, the State of the Operator, the State of Design, the State of Manufacture;  
(v) any State that provided relevant information, significant facilities or experts; and  
(vi) ; and
- (b) a final report which shall be compiled **[and published]** in the manner as prescribed in Document SA-CATS 12 and published within 12 months of the occurrence unless exceptional circumstances dictate otherwise.

(3) The Executive responsible for aircraft accident and incident investigation shall send a copy of the draft final report to the State that instituted the investigation and to all States that participated in the investigation, inviting their **[significant and substantiated]** comments on the report as soon as possible.

(4) The Executive responsible for aircraft accident and incident investigation shall send the draft final report of the investigation for comments to the State of Registry, State of the Operator, the Operator, the State of Design, organisation responsible for the final assembly of the aircraft and any other State that participated in the investigation [—

- (a) **the State of Registry;**  
(b) **the State of the Operator;**  
(c) **the State of Design; and**  
(d) **the State of Manufacture.]**

(5) The States or organisations referred to in sub-regulations (3) and (4) shall be given a period of 60 days from the date of **[receipt]** transmission of the draft final report, within which to make comments therein.

(6) The Executive responsible for aircraft accident and incident investigation shall give due consideration to any comments received within the period stated in sub-regulation (5) and may either amend the draft final report to include the substance of the comments received or, if desired by the State that provided comments, append the comments to the final report.

(7) If the Executive responsible for aircraft accident and incident investigation receives no comments within the period stated in sub-regulation (5), the Executive responsible for aircraft accident and incident investigation shall prepare and release the final report within 12 months from the date of the occurrence. Provided that if it is not possible to release the final report within the prescribed 12 months, the Executive responsible for aircraft accident and incident investigation shall issue an interim statement on each anniversary of the occurrence, detailing the progress of the investigation and any safety issues raised.

(8) The Executive responsible for aircraft accident and incident investigation shall send the final report of the investigation, without delay, to the State that instituted the investigation, the State of Registry, the State of the Operator, the State of Design, the State of Manufacture, any State that participated in the investigation, any State whose citizens have suffered fatalities or serious injuries, any State that provided relevant information, significant facilities or experts and, if the accident or incident involved an aircraft of a MCM exceeding 5 700 kg, to ICAO..”;

(h) the substitution in regulation 12.05.2 for sub-regulations (3), (4) and (5) of the following sub-regulations:

“(3) The appellant shall submit a copy of the appeal and any documents or records supporting such appeal, to the **[investigator-in-charge concerned]** Executive responsible for aircraft accident and incident investigation and shall furnish proof of such submission for the information of the Minister.

(4) The **[investigator-in-charge concerned]** Executive responsible for aircraft accident and incident investigation shall, within **[30]** 60 days of receipt of the copy of the appeal referred to in sub-regulation (3), deliver his or her written reply to such appeal to the **[Director of Investigation]** Minister.

(5) The Minister must—

- (a) adjudicate the appeal on the basis of the documents submitted to him or her; or
- (b) order the appellant and the **[investigator-in-charge concerned]** Executive responsible for aircraft accident and incident investigation to

appear before him or her, either in person or through a representative, at a time and place determined by him or her, to give evidence.”.

### **Amendment of Part 21 of the Regulations**

5. Part 21 of the Regulations is hereby amended –

(a) by the substitution in sub-regulation (1) of regulation 21.01.2, for paragraphs (g), (h) and (i) of the following paragraphs:

- “(g) manned free balloons; **[and]**
- (h) non-rigid airships; and
- (i) ornithopter.”;

(b) by the substitution for regulation 21.04.3 of the following regulation:

#### **“Airworthiness design standards**

**21.04.3** (1) An application for the issuing of a type acceptance certificate for a Class I product shall be accompanied with proof that—

- (a) the product complies with the appropriate airworthiness design standards referred to in regulation 21.02.3, effective at the date assigned in the foreign type certificate or an equivalent document, unless another date is specified by the Director;
- (b) the product complies with any special conditions prescribed in terms of regulation 21.02.13;
- (c) the feature or characteristic of the product makes it safe for the intended use; and
- (d) any airworthiness design standards not complied with are compensated for by factors providing an equivalent level of safety; and

(2) An application referred to in sub-regulation (1) shall also be accompanied by proof that the aircraft is equipped with an extinguishing agent that is not prohibited as prescribed in Document SA-CATS 21, in the case of—

- (a) an aeroplane with an MCTOW in excess of 5 700 kg for which application for certification was submitted on or after 2 March 2004;
- (b) a helicopter for which application for certification was submitted on or after 13 December 2007; and
- (c) an aeroplane with an MCTOW in excess of 750 kg but not exceeding 5 700 kg, for which application for certification was submitted on or after 13 December 2007.”.

- (c) by the substitution, in regulation 21.08.1, for sub-regulation (2) of the following sub-regulation:

“(2) A standard certificate of airworthiness may be issued to aircraft in the specific **[operational category]** airworthiness design standard as prescribed in technical standard 21.02.3 provided the aircraft meets the requirements of the specific regulatory part and may consist of the following **[operation]** categories –

- (a) **[non-commercial operations, part 91;]** normal, utility, acrobatic and commuter (aeroplanes);
- (b) **[training, part 141; and]** manned free balloon;
- (c) **[commercial operations, parts 121, 127, 133, 135, 137 and 138.]** transport category (aeroplanes);
- (d) normal category (rotorcraft);
- (e) transport category (rotorcraft); and
- (f) non-rigid airship.

- (d) by the substitution, in regulation 21.08.1, for sub-regulation (4) of the following sub-regulation:

“(4) 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 special category certificate of airworthiness: provided the aircraft **[— (a) can]** may be converted from one configuration to another by removing or adding equipment by simple mechanical means, and 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 part 121, part 127, part 135 or part 138, as the case may be, unless the Director finds this unnecessary for safety in a particular case.]”;**

- (e) by the substitution in regulation 21.08.12, for sub-regulations (1) and (2) of the following sub-regulations:

“(1) A certificate of airworthiness shall, subject to sub-regulation (2), be valid **[until –]** for a period of 12 months **[-;]** or **[(a) it expires, if an expiry date has been determined; or (b)]** until it is surrendered by the holder thereof, or is suspended by an authorised officer, inspector or authorised person, or cancelled by the Director.

(2) **[Subject to]** Notwithstanding the provisions of sub-regulation (1), a certificate of airworthiness shall **[remain valid for as long as]** be rendered invalid if–

- (a) the aircraft **[remains]** is removed from a South African aircraft register **[registered aircraft; and]**

- (b) **[in respect of an aircraft with a standard or restricted category certificate of airworthiness,]** the aircraft is not maintained in accordance with the regulations prescribed in Part 43[.];
- (c) the certificate of release to service for such aircraft is invalidated by virtue of the provisions of regulation 43.04.3(3); and
- (d) the aircraft does not comply with the design aspects of the appropriate airworthiness requirements prescribed in this Part.”.

### **Amendment of Part 43 of the Regulations**

6. Part 43 of the Regulations is hereby amended by –

- (a) the addition in regulation 43.02.1 after sub-regulation (5) of the following sub-regulation:

“(6) The owner of an aircraft shall ensure that the design and application of the aircraft maintenance programme takes into account human factors principles as prescribed in Document SA-CATS 43.”;

- (b) the substitution for regulation 43.02.17 of the following regulation:

#### **“Reinstatement of certificate of airworthiness after accident or incident**

**43.02.17** (1) When an aircraft has sustained damage to a Class 1 product such that the aircraft is no longer considered airworthy as defined by the appropriate airworthiness requirements, the certificate of airworthiness of such aircraft shall be invalid until the aircraft is restored to an airworthy condition as prescribed in Document SA-CATS 43.

(2) An owner or operator of the aircraft referred to in sub-regulation (1) shall notify the Director in writing, within 48 hours of such damage, of the details necessary to determine the airworthiness status of the aircraft.

(3) The Director shall, after receiving the notification referred to in sub-regulation (2), assess the airworthiness of the aircraft and may –

- (a) consider the damage sustained and if the aircraft is considered airworthy, permit the aircraft to resume flight;
- (b) prohibit the aircraft from resuming flight until it is restored to an airworthy condition as referred to in sub-regulation (1); or
- (c) subject to any conditions he or she may impose, permit the aircraft to fly, on a non-commercial operation, to an aerodrome where it will be restored to an airworthy condition.

(4) In the event that the damage referred to in sub-regulation (1) occurs outside of the territory of the Republic the Director shall, when prescribing any conditions as

prescribed in sub-regulation (3)(c), consider any limitations imposed by the State in whose territory the damage occurred.

(5) Any repair to 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 43.

(6) Following the repair of an aircraft that has been involved in an accident as defined in paragraph (b) of the definition of 'accident' in Part 1 or has sustained damage to a Class 1 product, the aircraft shall be inspected by an authorised officer, inspector or a person specifically authorised for the purpose in writing by the Director before it is released to service.

(7) An owner or operator of an aircraft referred to in this regulation shall pay the applicable fee for inspection conducted in terms of sub-regulation (6) as prescribed in Part 187.”;

- (c) the insertion of the following regulation after regulation 43.02.22:

**“Aircraft welding**

**43.02.23** (1) A person who performs welding on an aircraft, aircraft component or aircraft part shall—

- (a) be the holder of a certificate appropriate to the applicable welding and possess the level of qualification as prescribed in Document SA-CATS 43;
  - (b) perform the welding using appropriate methods, techniques and standard practices, as prescribed in Document SA-CATS 43; and
  - (c) use equipment necessary to ensure that welding is performed in accordance with the requirements of the appropriate aircraft or aircraft component manufacturer.”;
- (d) by the substitution in regulation 43.04.5 for sub regulation (2) of the following sub regulation:

**“(2) [If components are not installed in or allocated to an aircraft, the] A person certifying release to service of an aircraft shall certify the release to service on the appropriate form as prescribed in Document SA-CATS 43.”.**

**Amendment of Part 47 of the Regulations**

7. Part 47 of the Regulations is hereby amended by –

- (a) the addition of paragraph (j) in sub-regulation (2) of regulation 47.01.1:

“(j) a meteorological pilot balloon used exclusively for meteorological purposes.”;

- (b) the addition in sub-regulation (2) of regulation 47.02.1, after paragraph (k) of the following paragraph:

“(l) in the case of a first type of aircraft which is imported into the Republic for the first time, a copy of a type acceptance certificate issued in terms of regulation 21.04.5.”.

### **Amendment of Part 67 of the Regulations**

8. Part 67 of the Regulations is hereby amended by –

- (a) the substitution for regulation 67.00.7 of the following regulation:

#### **“Application for medical certificate**

**67.00.7** (1) An application for the issuing of a medical certificate shall be made on the appropriate prescribed form.

(2) An applicant who attends a medical examination or test for the issuing of a medical certificate shall –

- (a) produce proof of his or her identity; **[and]**
- (b) produce for inspection any licence held for which the certificate is required and the most recent medical certificate held, if any;
- (c) provide the DAME with a statement of medical facts detailing personal, familial and hereditary history; and
- (d) sign a declaration confirming the accuracy, completeness and truthfulness of the information contained in the medical examination form.

(3) Subject to the provisions of regulations 67.00.3(2)(c) and 67.00.4(3)(b)(iii), an applicant who complies with the appropriate medical requirements and standards referred to in regulation 67.00.2(6), shall be entitled to a medical certificate.

(4) Upon completion of the medical examination, a DAME shall complete and sign the appropriate part of the medical examination form.

(5) A DAME shall report to the medical assessor any case where, in the DAME’s opinion, an applicant’s failure to meet any requirement is such that exercise of the privileges of the licence being applied for or held, is likely to jeopardize aviation safety.”;

- (b) the substitution in regulation 67.00.6 for sub-regulation (3) of the following sub-regulation:

- (3) A medical certificate shall, subject to sub-regulation (5), be valid for a period of –
- (a) in the case of Class 2 certificate, 60 months calculated from the last day of the calendar month in which the medical certificate is issued where the holder is less than 40 years of age;
  - (b) in the case of Class 3 certificate, 48 months calculated from the last day of the calendar month in which the medical certificate is issued where the holder is less than 40 years of age;
  - (c) 24 months, in the case where the holder of a Class 2 or Class 3 medical certificate has passed his or her 40<sup>th</sup> birthday;
  - (d) 12 months, when the holder of a Class 2 or Class 3 medical certificate has passed his or her 50<sup>th</sup> birthday.”;

- (c) the substitution in regulation 67.00.6 for sub-regulation (5) of the following sub-regulation:

- “(5) Notwithstanding the provisions of sub-regulations (1) to (4), a DAME or a medical assessor may reduce the period of validity of a medical certificate and endorse such medical certificate with the reason for the reduction or with any limitation –
- (a) if any indication requires medical examination or test to be performed; or
  - (b) when the safe performance of the duties essential to the operation of an aircraft executed by the holder of such medical certificate, depends on a reduction in the period of validity of such medical certificate or compliance with any special limitation.

- (d) by the addition in regulation 67.00.8 after sub-regulation (4) of the following sub-regulation:

- “(4A) Notwithstanding the provisions of this Part, a medical assessor may, in exceptional circumstances, issue or renew a medical certificate to an applicant who does not meet some of the medical standards prescribed in this Part if –
- (a) accredited medical conclusion indicates that in special circumstances the applicant’s failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence applied for is not likely to jeopardize flight safety;
  - (b) relevant ability, skill and experience of the applicant and operational conditions have been given due consideration; and
  - (c) the licence is endorsed with any special limitation when the safe performance of the licence holder’s duties is dependent on compliance with such limitation.”.

## **Amendment of Part 91 of the Regulations**

9. Part 91 of the Regulations is hereby amended by –

- (a) the deletion of sub-regulations (3) and (5) in regulation 91.04.10;



- (b) the substitution in regulation 91.04.10 for sub-regulations (1), (2) and (4) of the following sub-regulations:

**“Flight recorders**

**91.04.10** (1) For the purposes of this regulation, any reference to –

- (a) **[the initial date of a type certificate or certificate of airworthiness means the first time that type certificate or certificate of airworthiness was issued for that aircraft type.]** a specified date upon which an application for the type certification is submitted to a Contracting State means the date such application is made for a new aircraft type, not the date of certification of particular aircraft variants or derivative models; and
- (b) a specified date upon which an individual certificate of airworthiness is first issued means the first time a certificate of airworthiness is issued for a new individual aircraft serial number that has just come off the assembly line.

(2) No owner or operator shall operate an aircraft engaged in international general aviation operations which—

- (a) is an aeroplane with **[an MCM exceeding 27 000 kg for which the individual certificate of airworthiness was first issued on or after 1 January 1989]** a MTOW exceeding 5700 kg for which the individual certificate of airworthiness was first issued on or after 1 January 2005 unless such aeroplane is equipped with a [Type I] Type 1A FDR that complies with the requirements prescribed in Document SA-CATS 91;
- (b) is an aeroplane with **[an MCM exceeding 5 700 kg for which the individual certificate of airworthiness was first issued on or after 1 January 2005]** a MTOW exceeding 27000 kg for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such aeroplane is equipped with a [Type I A] Type 1 FDR that complies with the requirements prescribed in Document SA-CATS 91;
- (c) is a helicopter with **[an MCM exceeding 7 000 kg, or having a passenger seating configuration of more than nineteen, for which the individual certificate of airworthiness was first issued on or after 1 January 1989]** a MTOW exceeding 3180 kg for which the individual certificate of airworthiness was first issued on or after 1 January 2016 unless such helicopter is equipped with a [Type IV] Type IVA FDR that complies with the requirements prescribed in Document SA-CATS 91; or
- (d) is a helicopter with **[an MCM exceeding 3 180 kg for which the individual certificate of airworthiness is first issued after 1 January 2016]** a MTOW exceeding 7000 kg or having a passenger seating configuration of more than 19, for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such helicopter is equipped with a [Type IVA] Type IV FDR that complies with the requirements prescribed in Document SA-CATS 91.

- [(e) is a turbine-engine helicopter with an MCM of over 2 250 kg up to and including 3 180 kg for which the application for type certification is submitted on or after 1 January 2018 shall be equipped with—
- (i) a Type IV A FDR; or
  - (ii) a Class C AIR capable of recording flight path and speed parameters displayed to the pilot(s); or
  - (iii) an ADRS capable of recording the essential parameters defined in Table 2 of Document SA-CATS 91.

(4) Unless if an aircraft is equipped with a CVR which complies with the requirements prescribed in Document SA-CATS 91, no owner or operator shall operate—

- (a) a turbine-engine aeroplane with a MTOW exceeding 5 700 kg for which the application for type certification was submitted to a Contracting State on or after 1 January 2016 and required to be operated by more than one pilot;
- (b) an aeroplane with a MTOW exceeding 27000 kg for which the individual certificate of airworthiness was first issued on or after 1 January 1987;  
or
- (c) a helicopter with a MTOW exceeding 7000 kg;

Provided that for helicopters not equipped with an FDR, at least the main rotor speed shall be recorded on the CVR.”;

(c) the substitution in sub-regulation (20) of regulation 91.04.10 for sub-paragraph (b)(iv) of the following sub-paragraph:

(b) for aircraft without an approved MEL—

- (iv) **[any CVR is combined with the FDR.]** such FDR is not combined with the CVR and the aircraft is equipped with a CVR that is serviceable and functioning in accordance with the requirements prescribed in Document SA-CATS 127.”;

(d) the substitution in sub-regulation (21) of regulation 91.04.10 for paragraph (a) of the following paragraph:

“(a) for aircraft with an approved MEL, the aircraft is operated in accordance with such MEL and the MEL incorporates the provisions of paragraph (b); or”;

(e) the substitution for regulation 91.04.18 of the following regulation:

**“[Hand-held fire] Fire extinguishers**

**91.04.18** No owner or operator of an aircraft shall operate the aircraft unless such aircraft is equipped with the appropriate **[hand-held]** fire extinguisher as prescribed in Document SA-CATS 91.”;

- (f) the substitution for regulation 91.05.1 of the following regulation:

**“Communication and surveillance equipment**

**91.05.1** (1) Except with prior written approval by the Director, no aircraft shall be operated in designated airspace or under IFR unless such aircraft is equipped with radio communication equipment capable of

- (a) two way communication at any time during the flight on such frequencies as **[may be]** prescribed by the appropriate authority; and
- (b) receiving meteorological information at any time during flight.

(2) The radio communication equipment referred to in sub-regulation (1) shall be capable of providing **[for]** communication on the aeronautical emergency frequency 121.5 MHz.

(2A) For operation where an RCP specification for PBC is prescribed, an owner or operator shall establish –

- (a) normal and abnormal procedures, including contingency procedures for such operation;
- (b) flight crew qualification and proficiency requirements, in accordance with appropriate RCP specifications;
- (c) a training programme for relevant personnel consistent with the intended operations;
- (d) appropriate maintenance procedures to ensure continued airworthiness in accordance with appropriate RCP specifications; and
- (e) a monitoring programme to receive reports of observed communication performance for submission to the Director.

(2B) For operations where surveillance equipment is required to meet RSP specifications for PBS, an aircraft shall, in addition to the requirements prescribed in sub-regulation (2A) –

- (a) be provided with surveillance equipment which will enable it to operate in accordance with the prescribed RSP specifications;
- (b) have information relevant to the aircraft RSP specification capabilities listed in the flight manual or other aircraft documentation approved by the State of Design or State of Registry; and
- (c) have information relevant to the aircraft RSP specification capabilities included in the MEL where applicable.

(2C) For commercial operations, the procedures or information required by sub-regulations (2A) and (2B) shall be established and documented in the operations manual.”;

- (g) the substitution, in regulation 91.07.12, for the heading and sub-regulation (1) of the following heading and sub-regulation:

**“Fuel and oil requirements**

**91.07.12** (1) **[The]** A pilot-in-command of an aircraft shall not commence a flight unless he or she is satisfied that the aircraft is carrying **[carries a]** sufficient amount of usable fuel and sufficient oil to complete the planned flight safely and to allow for deviations from the planned operation.”;

- (h) the substitution for the heading to regulation 91.07.35 of the following heading:

**“Additional [EDTD] EDTO requirements”**

- (i) the substitution in sub-regulation (2) of regulation 91.07.35 for the words preceding paragraph (a) and paragraph (c) of the following words and paragraph:

“(2) Requirements for **[extended diversion time operations]** EDTO: **[-]**

- (c) When approving the appropriate maximum diversion time for an operator for a particular aeroplane type engaged in **[extended diversion time operations]** EDTO, the Director shall **[ensure]** be satisfied that—

- (i) for all aeroplanes, the maximum diversion time shall not exceed the value of the **[most limiting]** EDTO significant system time limitation, if any, indicated in the aircraft flight manual directly or by reference, reduced by an operational safety margin of 15 minutes **[and relevant to that particular operation is not exceeded]**; and
- (ii) for an aeroplane **[aeroplanes]** with two turbine engines, the aeroplane is EDTO certified;”.

## **Amendment of Part 92 of the Regulations**

10. Part 92 of the Regulations is hereby amended by –

- (a) the insertion of the following regulation after regulation 92.00.36:

**“Cargo acceptance areas – provision of information**

**92.00.37** (1) An operator shall ensure that a sufficient number of notices providing information regarding the transport of dangerous goods are prominently displayed and

provided at a visible location at the cargo acceptance area to alert shippers or agents about any dangerous goods that may be contained in their cargo consignment.

(2) The notices referred to in sub-regulation (1) shall include visual examples of dangerous goods, including batteries.”.

### **Amendment of Part 93 of the Regulations**

11. Part 93 of the Regulations is hereby amended by –

(a) the substitution in regulation 93.02.15 for sub-regulation (3) of the following sub-regulation:

“(3) [The] An owner or operator shall designate a person responsible for the fatigue risk management system who meets the qualifications and experience requirements, and who will be responsible for the functions prescribed in Document SA-CATS 93.”;

(b) the insertion in regulation 93.02.15 of the following sub-regulation after sub-regulation (3):

“(4) A fatigue risk management system established in terms of sub-regulation (1) shall –

(a) be based upon scientific principles, knowledge and operational experience with the aim of ensuring that flight crew and cabin crew members are performing at an adequate level of alertness; and

(b) be integrated with the safety management system.”;

(c) the substitution in regulation 93.02.16 for sub-regulation (2) of the following sub-regulation:

“(2) The Director shall approve the commencement of a trial phase for implementation of the proposed fatigue risk management system for a trial period of up to [24] 36 months if the Director is satisfied that the operator has complied with the provisions of sub-regulation 93.02.15(2).”;

(d) the substitution in regulation 93.02.16 for sub-regulation (5) of the following sub-regulation:

“(5) After a period of [12] 24 months, an operator, approved under sub-regulation (2), may apply to the Director for full approval by providing evidence that the fatigue risk management system is delivering the required safety outcomes.”;

(e) the insertion in sub-regulation (1) of regulation 93.05.1 after paragraph (b) of the following paragraph:

“(c) communication, navigation and surveillance equipment as prescribed in regulations 91.05.1 and 91.05.2.”;

- (f) the substitution for regulation 93.06.8 of the following regulation:

**“93.06.8 (1) If [an operator] a CAO operates, under [their] its CAOC in a State, other than the Republic, the [operator] CAO shall notify the Director as well as the State in which the operation is located.**

**(2) On receipt of the notification referred to in sub-regulation (1), the Director shall coordinate safety and security oversight with the appropriate authority of the State in which the operation of the CAO is located.”;**

- (g) the substitution in regulation 93.07.23 for sub-regulation (1) of the following sub-regulation:

**“(1) No CAO or PIC shall use [a head-up display or enhanced vision system] automatic landing system, a HUD or equivalent display, EVS, NVG, SVS or CVS or any combination of those systems into a hybrid system for the safe operation of an aircraft, while operating in accordance with the IFR unless he or she meets the requirements specified in Document SA-CATS 93 and is approved to do so by the Director.”.**

#### **Amendment of Regulation 101.04.4 of the Regulations**

12. Regulation 101.04.4 is hereby amended by the substitution in sub-regulation (1) for paragraph (d) of the following paragraph:

**“(d) ensure that the RPAS operation is conducted in such a safe manner as to minimise the hazards to persons, property or other aircraft and in accordance with this Part.”.**

#### **Amendment of Part 121 of the Regulations**

13. Part 121 of the Regulations is hereby amended by –

- (a) the substitution in regulation 121.02.14 for sub-regulation (1) of the following sub-regulation:

**“(1) An air service operator who establishes a scheme for the regulation of flight time and duty periods in accordance with subparagraph (a)(ii) of sub-**

regulation 121.02.13 (1) shall establish a fatigue risk management system for the purpose of managing fatigue.”;

- (b) the addition in regulation 121.02.14 after sub-regulation (3) of the following sub-regulation:

“(4) A fatigue risk management system established in terms of sub-regulation (1) shall –

- (a) be based upon scientific principles, knowledge and operational experience with the aim of ensuring that flight crew and cabin crew members are performing at an adequate level of alertness; and  
(b) be integrated with the safety management system.”;

- (c) the substitution in regulation 121.02.15 for sub-regulation (2) of the following sub-regulation:

“(2) The Director shall approve the commencement of a trial phase for implementation of the proposed fatigue risk management system for a trial period of up to [24] 36 months if the Director is satisfied that the operator has complied with the provisions of sub-regulation 121.02.14 (2).”;

- (d) the substitution in regulation 121.02.15 for sub-regulation (5) of the following sub-regulation:

“(5) After a [12] 24 months period an operator, approved under sub-regulation 121.02.15 (2), may apply to the Director for full approval by providing evidence that the fatigue risk management system is delivering the required safety outcomes.”;

- (e) the substitution in sub-regulation (1) of regulation 121.03.3 for the words preceding paragraph (a) of the following words:

“(1) [Each] An air service operator shall provide ground and flight training to [their] its flight crew personnel, as applicable, that includes at least the following training components.”;

- (f) the insertion in sub-regulation (1) of regulation 121.03.3 of the following paragraph after paragraph (m):

“(mA) upset prevention and recovery training.”;

- (g) the insertion in sub-regulation (1) of regulation 121.05.3 after paragraph (n) of the following paragraph:

“(o) communication, navigation and surveillance equipment as prescribed in regulations 91.05.1 and 91.05.2.”;

(h) the insertion in regulation 121.05.12 after paragraph (e) of the following paragraph:

“(f) in the case of an aeroplane of a MCTOW in excess of 45 000kg or with a passenger seating configuration of more than 60, a compartment door that –

- (i) is designed to resist penetration by small arms fire and grenade shrapnel;
- (ii) is designed to resist forcible intrusions by unauthorized persons;
- (iii) is capable of being locked and unlocked from either pilot’s station; and
- (iv) has means for monitoring from the flight deck the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behavior or potential threat.”;

(i) the substitution in regulation 12.05.24 for sub-regulation (1) of the following sub-regulation:

“(1) No air service operator shall operate an aeroplane under this Part unless such aeroplane is equipped with—

- (a) at least one automatic ELT or two ELTs of any type as prescribed in technical standard 91.04.23(4); **[and]**
- (b) where the aeroplane is of a type for which the individual certificate of airworthiness was first issued after 1 July 2008, **[it shall be equipped with]-**
  - (i) at least two ELTs, one of which shall be automatic; or
  - (ii) at least one ELT of any type as prescribed in Document SA-CATS 91, provided that the aeroplane has the capability to autonomously transmit information regarding its position at least once every minute when in distress as prescribed in Document SA-CATS 121.”;

(j) insertion after regulation 121.05.25 of the following regulation:

#### “Fire extinguisher

**121.05.26** (1) An agent used in a built-in fire extinguisher for a lavatory disposal receptacle for towels, paper or waste in an aeroplane for which the individual certificate of airworthiness was first issued on or after 31 December 2011 and an extinguishing agent used in a portable fire extinguisher in an aeroplane for which the individual certificate of airworthiness is first issued on or after 31 December 2018 shall—

- (a) meet the applicable minimum performance requirements as prescribed in Document SA-CATS 121; and
- (b) not be of a type mentioned in Document SA-CATS 121.



(2) The requirements regarding the extinguishing agents to be used in fire extinguishers is prescribed in Document SA-CATS 121.”;

- (k) the insertion in regulation 121.09.2 after sub-regulation (4) of the following sub-regulations:

“(4A) The maintenance programme shall be based on information made available by the State of Design or by the organisation responsible for the type design, and any applicable operational, maintenance and regulatory requirements issued by the Director.

(4B) Any amendment to the approved programme shall be formulated by the air service operator, to reflect changes in the type certificate holder’s recommendations, modifications, reliability programme, service experience, or as required by the Director.”.

### **Amendment of Part 127 of the Regulations**

14. Part 127 of the Regulations is hereby amended by –

- (a) the insertion in sub-regulation (1) of regulation 127.05.3 of the following paragraph after paragraph (m):

“(n) communication, navigation and surveillance equipment as prescribed in regulations 91.05.1 and 91.05.2.”;

- (b) the substitution for regulation 127.05.14 of the following regulation:

#### **“Flight recorders**

**127.05.14** (1) For the purposes of this regulation, any reference to –

(a) a specified date upon which an application for the type certification is submitted to a Contracting State means the date an application is made for a new aircraft type, not the date of certification of particular aircraft variants or derivative models; and

(b) a specified date upon which an individual certificate of airworthiness is first issued means the first time a certificate of airworthiness is issued for a new individual aircraft serial number that has just come off the assembly line.

(2) No air service operator shall operate in a commercial operation—

- (a) a helicopter of a MCTOW exceeding 3180 kg for which the individual certificate of airworthiness was first issued on or after 1 January 2016 unless such helicopter is equipped with a Type IVA FDR that complies with the requirements prescribed in Document SA-CATS 127;
- (b) a helicopter of a MCTOW exceeding 7000 kg, or having a passenger seating configuration of more than 19, for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such helicopter is equipped with a Type IV FDR that complies with the requirements prescribed in Document SA-CATS 127;
- (c) a turbine-engine helicopter of a MCTOW of between 2251 kg and 3180 kg for which the application for type certification was submitted to a Contracting State on or after 1 January 2018 unless if such helicopter is equipped with –
  - (i) a Type IV A FDR; or
  - (ii) a class C AIR capable of recording flight path and speed parameters displayed to the pilot; or
  - (iii) an ADRS capable of recording the essential parameters prescribed in Document SA-CATS 91 that complies with the requirements prescribed in Document SA-CATS 127.

(3) An air service operator shall ensure that the following FDRs are not installed in a helicopter referred to in sub-regulation (2):

- (a) engraving metal foil FDR;
- (b) photographic film FDR;
- (c) analogue FDR using frequency modulation; and
- (d) magnetic tape FDR.

(4) A Type IV, Type IVA and Type V FDR shall be capable of retaining the information recorded during at least the last ten hours of its operation.

(5)(a) An air service operator shall not operate in a commercial operation a helicopter of a MCTOW exceeding 7000 kg unless such helicopter is equipped with a CVR.

(b) For a helicopter not equipped with an FDR, at least the main rotor speed shall be recorded on the CVR.

(6) An air service operator shall ensure that a CVR installed in accordance with this regulation is not a magnetic tape and wire CVR.

(7) A helicopter required to be equipped with a CVR shall be equipped with a CVR capable of retaining the information recorded during the last two hours of its operation.

(8) A helicopter for which an individual certificate of airworthiness is first issued on or after 1 January 2016, which utilize any of the data link communications applications

prescribed in Document SA-CATS 127 and is required to carry a CVR, shall be capable of recording on a flight recorder the data link communications messages.

(9) A helicopter which is modified on or after 1 January 2016 to install and utilize any of the data link communications applications prescribed in Document SA-CATS 127 and which is required to carry a CVR shall be capable of recording on a flight recorder the data link communications messages.

Note 1.— Data link communications are currently conducted by either ATN-based or FANS 1/A-equipped helicopter.

Note 2.— A Class B AIR could be a means for recording data link communications applications messages to and from the helicopters where it is not practical or is prohibitively expensive to record those data link communications applications messages on FDR or CVR.

(10) The minimum recording duration on the data link recorder shall be equal to the duration of the CVR.

(11) A data link recording on a data link recorder shall be able to be correlated to the recorded cockpit audio.”;

- (c) the addition in regulation 127.09.2 after sub-regulation (4) of the following sub-regulations:

“(4A) The maintenance programme shall be based on information made available by the State of Design or by the organisation responsible for the type design, and any applicable operational, maintenance and regulatory requirements issued by the Director.

(4B) Any amendment to the approved programme shall be formulated by the air service operator, to reflect changes in the type certificate holder’s recommendations, modifications, reliability programme, service experience, or as required by the Director.”;

### **Amendment of Part 128 of the Regulations**

15. Part 128 of the Regulations is hereby amended by –

- (a) the insertion in sub-regulation (1) of regulation 128.05.3 after paragraph (m) of the following paragraph:

“(n) communication, navigation and surveillance equipment as prescribed in regulations 91.05.1 and 91.05.2.”;

- (b) by the substitution for regulation 128.07.2 of the following regulation:

### **“Establishment of procedures**

**128.07.2** (1) An operator shall establish procedures and instructions, for each helicopter type, containing ground personnel and flight crew members’ duties for all types of operations on the ground and in flight.

(2) An operator shall establish a checklist system to be used by flight crew members for all phases of operation under normal, abnormal and emergency conditions, to ensure that the operating procedures in the operations manual referred to in regulation 128.04.1, are followed.

(3) An operator shall ensure that flight crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the helicopter.

(4) An operator shall establish flight planning procedures which must specify the duties of the PIC regarding flight preparation as prescribed in regulation 91.02.7, to provide for the safe conduct of the flight.

(5) An operator shall ensure that the flight planning procedures are included in the operations manual.”.

### **Amendment of Part 135 of the Regulations**

16. Part 135 of the Regulations is hereby amended by –

(a) the substitution in regulation 135.02.10 for sub-regulation (1) of the following sub-regulation:

“(1) An air service operator who establishes a scheme for the regulation of flight time and duty periods in accordance with subparagraph (a)(ii) of sub-regulation 135.02.9(2) shall establish a fatigue risk management system for the purpose of managing fatigue.”;

(b) the insertion in regulation 135.02.10 after sub-regulation (3) of the following sub-regulation:

“(4) A fatigue risk management system established in terms of sub-regulation (1) shall –

- (a) be based upon scientific principles, knowledge and operational experience with the aim of ensuring that flight crew and cabin crew members are performing at an adequate level of alertness; and
- (b) be integrated with the safety management system.”;
- (c) the substitution in regulation 135.02.11 for sub-regulation (2) of the following sub-regulation:
- “(2) The Director shall approve the commencement of a trial phase for implementation of the proposed fatigue risk management system for a trial period of up to **[24]** 36 months if the Director is satisfied that the operator has complied with the provisions of sub-regulation 135.02.10(2).”;
- (d) the substitution in regulation 135.02.11 for sub-regulation (2) of the following sub-regulation:
- “(5) After a **[12]** 24 months period an operator, approved under sub-regulation 135.02.11(2), may apply to the Director for full approval by providing evidence that the fatigue risk management system is delivering the required safety outcomes.”;
- (e) the substitution in sub-regulation (2) of regulation 135.03.3 for paragraph (k) of the following paragraph:
- “(k) dangerous goods training **[if the operator is authorised to carry dangerous goods or, if not so authorised, dangerous goods awareness training; and]**”;
- (f) the insertion in sub-regulation (2) of regulation 135.03.3 after paragraph (k) of the following paragraph:
- “(kA) upset prevention and recovery training; and”;
- (g) the insertion in sub-regulation (1) of regulation 135.05.3 after paragraph (m) of the following paragraph:
- “(n) communication, navigation and surveillance equipment as prescribed in regulations 91.05.1 and 91.05.2.”;
- (h) the substitution in regulation 135.05.16 for sub-regulation (1) of the following sub-regulation:
- “(1) No air service operator shall operate an aeroplane under this Part unless such aeroplane is equipped with—

- (a) at least one automatic ELT or two ELTs of any type as prescribed in Document SA-CATS 91; **[and]**
  - (b) where the aeroplane is of a type for which the individual certificate of airworthiness was first issued after 1 July 2008, **[it shall be equipped with]-**
    - (i) at least two ELTs, one of which shall be automatic; or
    - (ii) at least one ELT of any type as prescribed in Document SA-CATS 91, provided that the aeroplane has the capability to autonomously transmit information regarding its position at least once every minute when in distress as prescribed in Document SA-CATS 121.”;
- (i) the insertion in regulation 135.09.2 after sub-regulation (2) of the following sub-regulations:
- (2A) The maintenance programme shall be based on information made available by the State of Design or by the organisation responsible for the type design, and any applicable operational, maintenance and regulatory requirements issued by the Director.
- (2B) Any amendment to the approved programme shall be formulated by the air service operator, to reflect changes in the type certificate holder’s recommendations, modifications, reliability programme, service experience, or as required by the Director.”.

### **Amendment of Part 145 of the Regulations**

17. Part 145 of the Regulations is hereby amended by –
- (a) the substitution in sub-regulation (2) of regulation 145.01.1 for paragraph (b) of the following paragraph:

“(b) the AMO complies with the provisions of this Part and the relevant provisions of Part 140.”;
  - (b) the substitution in sub-regulation (1) of regulation 145.01.6 for paragraphs (a) and (b) of the following paragraphs:

“(a) Category A ratings **[and Category B ratings]** for all types of aircraft, excluding rotorcraft either singly or in the classes as prescribed in Document SA-CATS 145;

(b) Category B ratings for aircraft **[rotorcraft only]**, excluding any engine, either singly or in the classes as prescribed in Document SA-CATS 145;”;
  - (c) the substitution in regulation 145.01.11 for sub-regulations (2) and (3) of the following sub-regulations:

“(2) The approval holder shall ensure that aircraft maintenance personnel receive as prescribed in Document SA-CATS 145—

- (a) **[receive or has received]** type- or model-specific training in respect of the aircraft or aircraft components for which the organisation has received maintenance approval;
- (b) **[receive periodically recurrent]** training to keep abreast of **[with specific attention to new technologies]** new technology developments and maintenance techniques; and
- (c) initial and continuation training appropriate to their assigned tasks and responsibilities.

**[as prescribed in Document SA-CATS 145.]**

(3) The training programme, contemplated in sub-regulation (1), shall – **[be part of the organisation’s manual of procedure.]**

- (a) include training in knowledge and skills related to human factors principles, including coordination with other maintenance personnel and flight crew; and
- (b) be part of the organisation’s manual of procedure.”;

(d) the insertion in regulation 145.02.4 after sub-regulation (3) of the following sub-regulation:

“(3A) The applicant shall ensure that a senior person required by this Part –

- (a) is fit and competent; and
- (b) has never held a senior position in the previous five years in any organisation whose approval was cancelled by the Director.”;

(e) the substitution for regulation 145.02.7 of the following regulation:

#### **“Issuing of approval**

**145.02.7** (1) An applicant shall be issued an AMO approval if the Director is satisfied that –

- (a) the applicant meets the requirements prescribed in Part 145 as applicable and the relevant provisions of Part 140;
- (b) the applicant has compiled a statement of compliance which is accepted by the Director; and
- (c) the granting of the approval is not contrary to the interests of aviation safety.

(2) An AMO approval and associated operations specifications shall be issued on the appropriate form and contain at least the information prescribed in Document SA-CATS 145.”;

- (f) the insertion in regulation 145.02.9 after sub-regulation (2) of the following sub-regulation:

“(2A) The continued validity of the AMO approval shall depend upon the organisation remaining in compliance with the provisions of this Part and the relevant provisions of Part 140.”;

- (g) the substitution for sub-regulation (2) in regulation 145.02.13 of the following sub-regulation:

“(2) The holder of an approval shall ensure that all persons who, on behalf of the AMO, are directly in charge of any maintenance or inspection or are authorised to issue certificates of release to service, authorised release certificates and certificates relating to the maintenance of an aircraft, are appropriately licensed and rated in terms of Part 66, or have been issued with a certification authorisation with the appropriate rating, as provided for in the organisation’s manual of procedure in accordance with regulation 43.04.1(1).”;

- (h) the substitution in regulation 145.02.15 for sub-regulation (1) of the following sub-regulation:

“(1) The holder of an AMO approval [with a Category A rating] shall keep [adequate] records of all maintenance performed by the AMO.”.

#### **Amendment of regulation 175.03.4 of the Regulations**

18. Regulation 175.03.4 is hereby amended by the insertion after sub-regulation (2) of the following sub-regulation:

“(3) A holder of an AIS certificate shall ensure that information or product originating from another State which has been annotated to be copyright protected is made available to a third party only on condition that the third party is made aware that the information or product is copyright protected.”.

#### **Substitution of regulation 174 of the Regulations**

19. The following Part is hereby substituted for Part 174 of the Regulations:

#### **“Part 174: Meteorological Information Services**



## **List of Regulations**

### **SUBPART 1: GENERAL**

- 174.01.1    Applicability
- 174.01.2    Designation of aviation meteorological authority
- 174.01.3    Quality management system
- 174.01.4    Safety management system

### **SUBPART 2: PROVISION OF METEOROLOGICAL SERVICES**

- 174.02.1    General
- 174.02.2    Briefing and consultation
- 174.02.3    Provision of meteorological information
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### **SUBPART 3: METEOROLOGICAL OBSERVATIONS AND REPORTS**

- 174.03.1    Meteorological reports
- 174.03.2    Meteorological forecasts
- 174.03.3    Meteorological warning information
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- 174.03.5    Information for ATM and SAR

### **SUBPART 1: GENERAL**

#### **Applicability**

- 174.01.1    This part applies to the provision of meteorological information services in air navigation.

### **Designation of aviation meteorological authority**

**174.01.2** (1) The South African Weather Service designated in terms of section 3 of the South African Weather Service Act, 2001 (Act No. 8 of 2001), as the aviation meteorological authority to fulfil international obligations of the Republic shall be deemed to have been so designated in terms of these regulations.

(2) For the purposes of these regulations, the South African Weather Service is referred to as meteorological service provider.

(3)(a) The meteorological service provider shall ensure that it has adequately qualified and competent personnel to enable it to exercise its powers and perform its functions prescribed in this Part.

(b) The qualification of the personnel referred to in paragraph (a) shall be as prescribed in Document SA-CATS 174.

(3) The meteorological service provider shall establish and implement a training programme for personnel in its employ.

### **Quality management system**

**174.01.3** (1) The meteorological service provider shall establish and implement a quality management system to provide for the control and supervision of its meteorological information service.

(2) The minimum standards for quality management system shall be as prescribed in Document SA-CATS 174.

### **Safety management system**

**174.01.4** The meteorological service provider shall establish and implement a SMS consistent with the framework prescribed in Part 140.

## **SUBPART 2: PROVISION OF METEOROLOGICAL SERVICES**

### **General**

**174.02.1** (1) Only the designated meteorological service provider shall provide meteorological services in air navigation.

(2) The meteorological services referred to in sub-regulation (1) shall be as prescribed in Document SA-CATS 174.

(3) The meteorological service provider shall consider human factors principles when determining meteorological services for air navigation.

### **Briefing and consultation**

**174.02.2** (1) The meteorological service provider shall provide briefing and consultation to flight crew members and other flight operations personnel regarding observed and forecast meteorology along their flight path.

(2) The minimum requirements for provision of briefing and consultancy shall be as prescribed in Document SA-CATS 174.

### **Provision of meteorological information**

**174.02.3** (1) The meteorological service provider shall provide meteorological information to –

- (a) air service operators;
- (b) flight crew members;
- (c) air traffic services units;
- (d) search and rescue service providers;
- (e) airport management; and
- (f) such other participants in civil aviation as may be determined from time to time.

(2) The format of meteorological information to be provided shall be as prescribed in Document SA-CATS 174.

### **Meteorological information for operators and flight crew**

**174.02.4** (1) The meteorological service provider shall, during pre-flight planning, in-flight re-planning, departures and aircraft in flight, provide an air service operator and flight crew members with the meteorological information prescribed in Document SA-CATS 174.

- (2) The meteorological information referred to in sub-regulation (1) shall –
- (a) cover the entire flight path including landing and alternate aerodromes designated by the operator;
  - (b) cover the flight with respect to time, altitude, and geographical extent;
  - (c) be confined to flights originating within the territory of the Republic; and
  - (d) include forecasts received from the WAFC.

(3) The meteorological service provider shall designate a meteorological office at an aerodrome to provide meteorological information.

### **World area forecast system**

**174.02.5** (1) The meteorological service provider shall ensure that it receives and provide without any modifications to air service operators and flight crew, the world area forecast products issued by the WAFC.

(2) The meteorological service provider shall notify the VAAC when a volcano has erupted or is expected to erupt or a volcanic ash is reported in its area of responsibility.

**SUBPART 3: METEOROLOGICAL OBSERVATIONS AND REPORTS****Meteorological reports**

174.03.1 (1) The meteorological service provider shall provide up to date meteorological reports which include –

- (a) routine observations;
- (b) special observations;
- (c) routine aircraft observations; and
- (d) special aircraft observations.

(2) The minimum standards for meteorological observations and reports shall be as prescribed in Document SA-CATS 174.

**Meteorological forecast**

174.03.2 (1) The meteorological service provider shall provide meteorological forecast to air service operators for planning of their operations.

(2) The meteorological forecast referred to in sub-regulation (1) shall be issued in accordance with the minimum standards as prescribed in Document SA-CATS 174.

**Meteorological warning information**

174.03.3 (1) The meteorological service provider shall provide air service operators, flight crew members and other users in the Republic with meteorological warning information relating to occurrence or expected occurrence of weather phenomena that may affect the safety of flight operation.

(2) The meteorological warning information shall be prepared and issued in accordance with the format prescribed in Document SA-CATS 174.

**Aerodrome climatological information**

174.03.4 (1) The meteorological service provider shall prepare, store and provide aeronautical climatological information including climatological tables and summaries for the development of air navigation and the application of meteorology to air navigation.

(2) The meteorological service provider shall prepare climatological tables and summaries for all international aerodromes in the Republic and shall ensure that all the data relating thereto is stored at all international aerodromes.

(3) The meteorological service provider shall ensure the collection of meteorological observational data relating to sites for new aerodromes and to additional runways at existing aerodromes at the commissioning of aerodromes or runways.

(4) The meteorological service provider shall ensure that climatological data used for computation of aerodrome climatological tables and summaries is five years or older.

(5) The meteorological service provider shall ensure that copies of meteorological climatological data are kept for a period of not less than three years.

### **Information for ATMS and search and rescue**

**174.03.5** The meteorological service provider shall designate an aerodrome meteorological office or meteorological watch office for the supply of meteorological information to ATMS and search and rescue.”.

### **Substitution of Part 177 of the Regulations**

20. The following Part is hereby substituted for Part 177 of the Regulations:

#### **“Part 177                   Aeronautical Charts**

#### **List of Regulations**

#### **SUBPART 1:           GENERAL**

- 177.01.1    Applicability
- 177.01.2    Requirements for approval
- 177.01.3    Aeronautical cartography design standards
- 177.01.4    Safety inspections and audits
- 177.01.5    Register of certificates
- 177.01.6    Display of certificate

#### **SUBPART 2:           REQUIREMENTS FOR APPROVAL**

- 177.02.1    Manual of procedure
- 177.02.2    Quality assurance system
- 177.02.3    Personnel requirements
- 177.02.4    Facility requirements

- 177.02.5 Application for approval or amendment of certificate
- 177.02.6 Issuing of certificate
- 177.02.7 Period of validity
- 177.02.8 Renewal of certificate
- 177.02.9 Documentation
- 177.02.10 Duties of holder of aeronautical cartography certificate

### **SUBPART 3: TRAINING REQUIREMENTS**

- 177.03.1 Training and checking

### **SUBPART 1: GENERAL**

#### **Applicability**

**177.01.1** (1) This Part applies to –

- (a) the design, maintenance, revision, amendment or adaptation of aeronautical charts for publication in the IAIP; and
- (b) the approval and operations of an organisation providing aeronautical cartography design, maintenance, revision, amendment or adaptation services for aeronautical charts.

(2) This Part does not apply to an organisation providing aeronautical cartography design, maintenance, revision, amendment or adaptation services for charts not published in the IAIP.

#### **Requirements for certificate**

**177.01.2** No organisation shall design, maintain, review, amend or adapt aeronautical charts except under the authority of, and in accordance with the provisions of, an aeronautical cartography certificate issued under this Part.

#### **Aeronautical cartography design standards**

**177.01.3** All aeronautical charts shall comply with the design standards as prescribed in Document SA-CATS 177.

## **Safety inspections and audits**

**177.01.4** (1) An applicant for the issuing of an aeronautical cartography certificate shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity of an application made in terms of this Part.

(2) The holder of an aeronautical cartography certificate shall permit an authorised officer, inspector or authorised person to –

- (a) carry out such safety inspections and audits which may be necessary to determine compliance with the appropriate requirements prescribed in this Part;
- (b) inspect the practices and procedures of the holder in performing aeronautical cartography services in terms of this Part; and
- (c) inspect and test any systems and equipment used for, or in relation to, aeronautical cartography services in terms of this Part.

## **Register of certificates**

**177.01.5** (1) The Director shall maintain a register of aeronautical cartography certificates issued in terms of this Part.

(2) A register referred to in sub-regulation (1) shall contain –

- (a) the full name of the holder of the certificate;
- (b) the business address of the holder of the certificate;
- (c) the postal address of the holder of the certificate;
- (d) the date on which the certificate was issued or renewed;
- (e) the type of aeronautical cartography services in respect of which the certificate was issued;
- (f) the date on which the certificate was suspended, if applicable; and
- (g) the date on which the certificate expires.

(3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven working days from the date on which the certificate is issued.

(4) A copy of the register shall be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests such a copy.

## **Display of certificate**

**177.01.6** The holder of an aeronautical cartography certificate shall display the certificate at such holder's principal place of business in a prominent place which is easily accessible to the public and shall produce the original certificate to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.

## **SUBPART 2: REQUIREMENTS FOR APPROVAL**

### **Manual of procedure**

**177.02.1** (1) An applicant for the issuing of an aeronautical cartography certificate shall submit to the Director a manual of procedure for approval.

(2) A manual of procedure referred to in sub-regulation (1) shall comply with the requirements prescribed in this Subpart and contain the information as prescribed in Document SA-CATS 177.

- (3) The holder of an aeronautical cartography certificate shall –
- (a) keep the manual of procedure in a readily accessible form and place;
  - (b) ensure that each amendment to its manual of procedure meets the applicable requirements of this Part; and
  - (c) comply with the amendment procedures contained in its manual of procedures.

(4) The holder of an aeronautical cartography certificate who intends to amend any part of its manual of procedures shall obtain prior approval of the Director before effecting such amendment.

(5) The Director may specify conditions under which a certificate holder shall operate during or following any amendments to a manual of procedure referred to in sub-regulation (4), to ensure continued compliance with the requirements of this Part.

(6) The holder of a certificate shall make such amendments to its manual of procedure which the Director may consider necessary in the interests of aviation safety.

### **Quality assurance system**

**177.02.2** (1) An applicant for the issuing of an aeronautical cartography certificate shall establish a quality assurance system for the control and supervision of the services covered by the application.



(2) The minimum standards for a quality assurance system are prescribed in Document SA-CATS 177.

### **Personnel requirements**

**177.02.3** (1) An applicant for the issuing of an aeronautical cartography certificate shall engage, employ or contract –

- (a) adequately trained personnel to –
  - (i) design, maintain, revise, amend or adapt aeronautical chart services listed in its manual of procedure; and
  - (ii) perform quality assurance checks and verification of aeronautical chart as listed in its manual of procedure;
- (b) a senior person identified as the accountable aeronautical cartographer, to whom contractual authority shall be granted to ensure that all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Subpart, and who shall in addition be vested with powers and responsibilities to –
  - (i) access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the organisation;
  - (ii) order cessation of any activity where there is non-compliance with the requirements of this Part;
  - (iii) establish liaison with the Director with a view to ascertain the manner of compliance with the requirements prescribed in this Part; and
  - (iv) report directly to the management of the organisation on his or her duties and responsibilities prescribed in the Part;
- (c) a standards officer who is responsible for quality control, and who has direct access to the accountable aeronautical cartographer on matters relating aviation safety.

(2) An accountable aeronautical cartographer referred to in paragraph (b) of sub-regulation (1) shall meet the minimum requirements prescribed in Document SA-CATS 177.

(3) An applicant for the issuing of an aeronautical cartography certificate shall ensure that its personnel are of sufficient numbers and experience and have been given appropriate authority to be able to discharge their allocated responsibilities.

### **Facility requirements**

**177.02.4** (1) An applicant for the issuing of an aeronautical cartography certificate shall satisfy the Director that it has facilities and equipment necessary to perform the scope of aeronautical cartography design, including –

- (a) providing premises and equipment appropriate for the applicant's personnel to perform aeronautical cartography services as specified in the manual of procedure taking into account human factors; and
- (b) ensuring that its employees have access to all necessary data to perform aeronautical cartography service as specified in the manual of procedure.

(2) The facilities and equipment referred to in sub-regulation (1) shall comply with the minimum requirements prescribed in Document SA-CATS 177.

### **Application for approval or amendment of certificate**

**177.02.5** An application for an aeronautical cartography certificate or an amendment thereof, shall be –

- (a) made to the Director on the appropriate form; and;
- (b) accompanied by –
  - (i) the manual of procedure referred to in regulation 177.02.1; and
  - (ii) the appropriate fees prescribed in Part 187.

### **Issuing of certificate**

**177.02.6** (1) The Director shall issue an aeronautical cartography certificate if the Director is satisfied that –

- (a) the applicant meets the requirements prescribed in subpart 2;
- (b) the senior personnel of the applicant required by regulation 177.02.3 are fit and competent persons and have never held a senior position in an organisation whose approval was cancelled by the Director; and
- (c) the granting of the certificate is not contrary to the interests of aviation safety.

(2) A certificate issued in terms of sub-regulation (1) shall specify the aeronautical cartography that the certificate holder is authorised to provide.

### **Period of validity**

**177.02.7** (1) An aeronautical cartography certificate shall be valid for a period of one year, calculated from the date of issuing or renewal thereof.

(2) A certificate shall remain in force until it expires, is suspended or cancelled in terms of these Regulations.

(3) A holder of a certificate which expires or cancelled, shall, within 30 days from the date on which the approval expires or is cancelled, surrender the certificate to the Director.

### **Renewal of certificate**

**177.02.8** A holder of an aeronautical cartography certificate shall, at least 60 days immediately preceding the date on which such certificate expires, apply for the renewal of such certificate.

### **Documentation**

**177.02.9** (1) A holder of an aeronautical cartography certificate shall ensure that –

- (a) the documentation required by this Part is reviewed and authorised by appropriate personnel before issue;
- (b) the current issue of relevant documentation is available to personnel at all locations where access to such documentation is required for the provision of the services listed in its manual of procedure; and
- (c) obsolete documentation is removed from all points of issue or use.

### **Duties of holder of aeronautical cartography certificate**

**177.02.10** (1) A holder of an aeronautical cartography certificate shall –

- (a) comply with all procedures and standards detailed in the manual of procedure;
- (b) make each applicable part of the manual of procedure available to personnel who require those parts to carry out their duties; and
- (c) continue to meet the standards and comply with the requirements of this part;

## **SUBPART 3: TRAINING REQUIREMENTS**

### **Training and checking**

**177.03.1** (1) A holder of an aeronautical cartography certificate shall establish and maintain a training and checking programme for all personnel to ensure that such personnel are adequately trained and qualify to perform their assigned duties.

(2) The training and checking programme referred to in sub-regulation (1) shall be submitted to the Director for approval.

(3) The training programme referred to in sub-regulation (1) shall include a system of record keeping as prescribed in Document SA-CATS 177.

(4) A holder of an aeronautical cartography certificate shall publish the training programme

referred to in sub-regulation (1) in the manual of procedure.

(5) A holder of an aeronautical cartography certificate shall provide training to its personnel that includes at least the following training components—

- (a) initial aeronautical cartography training;
- (b) on the job training; and
- (c) recurrent aeronautical cartography training at intervals prescribed in Document SA-CATS 177.

(6) A holder of an aeronautical cartography certificate shall ensure that –

- (a) prior to assignment to duty, each person required to receive training in accordance with this Subpart, whether employed on a full-time or part-time basis, receives such training as appropriate to his or her duties; and
- (b) the training facilities, equipment and personnel are acceptable to the Director and meet the requirements prescribed in Document SA-CATS 177.

(7) Only approved training as prescribed in Document SA-CATS 177 shall be considered for the initial and recurrent training referred to in sub-regulation (5).

### **Short title and commencement**

21. This Amendment is called the Sixteenth Amendment of the Civil Aviation Regulations, 2017 and shall come into operation 30 days after publication in the Government Gazette.