

# **GOVERNMENT GAZETTE**

# **OF THE**

# **REPUBLIC OF NAMIBIA**

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# **Government Notice**

# MINISTRY OF WORKS AND TRANSPORT

No. 89

AMENDMENT OF NAMIBIAN CIVIL AVIATION REGULATIONS, 2001: CIVIL AVIATION ACT, 2016

Under sections 54 to 57 of the Civil Aviation Act, 1962 (Act No. 6 of 2016), and after consultation with the Board of Directors of the Namibia Civil Aviation Authority, I have -

- (a) made the regulations set out in the Schedule;
- (b) determined that those regulations come into effect 90 days after the date of publication of this notice; and
- (c) repealed the -
  - (i) Air Navigation Regulations published under Government Notices No. R141 of 30 January 1976, 1283 of 23 July 1976, 2380 of 18 November 1977, 225 of 1 December 1995 and 60 of 31 March 1998; and
  - (ii) Safety Directive published under General Notice No. 223 of 15 August 1997.

2020

# J. MUTORWA MINISTER OF WORKS AND TRANSPORT

Windhoek, 13 February 2020

#### SCHEDULE

#### Definitions

1. In these regulations "the Regulations" means the Namibian Civil Aviation Regulations published under Government Notice No. 1 of 2 January 2001, as amended by Government Notice Nos. 57 of 1 April 2006, 201 of 1 November 2006, 80 of 4 April 2017, 210 of 31 August 2018 and 293 of 8 November 2018.

#### **Amendment of Regulations**

2. The Regulations are amended by the substitution for the expressions "designated inspector, authorised officer or authorised person" and "designated inspector, authorised officer and authorised person" wherever they occur of the expressions "authorised officer, inspector or authorised person" and "authorised officer, inspector and authorised person" respectively.

#### Amendment of regulation 1.00.1 of Regulations

- **3.** Regulation 1.00.1 of the Regulations is amended -
- (a) by the insertion after the definition of "ATS route" of the following definitions:

"authorised officer" means a person designated as such under 37(1)(a) of the Act;

"authorised person" means a person designated as such under 37(1)(b) of the Act;";

(b) by the insertion after the definition of "close corporation" of the following definition:

""command and control (C2) link" means the data link between the remotely piloted aircraft and the remote pilot station for the purposes of managing the flight;";

- (c) by the deletion of the definition of "designated inspector, authorised officer or authorised person";
- (d) by the insertion after the definition of "ditching" of the following definition:

""Document NAM-CATS-AAR" means a document on the Namibian Civil Aviation Technical Standards relating to Airspace and Air Routes which is published by the Executive Director in terms of section 227 of the Act;";

(e) by the substitution for the definition of "Document NAM-CATS-AIRS" of the following definition:

""Document NAM-CATS-AIS" means a document on the Namibian Civil Aviation Technical Standards relating to Aeronautical Information Services which is published by the Executive Director in terms of section 227 of the Act;";

(f) by the insertion after the definition of "Document NAM-CATS-ARO" of the following definition:

""Document NAM-CATS-ATEL" means a document on the Namibian Civil Aviation Technical Standards relating to Aeronautical Telecommunications Services which is published by the Executive Director in terms of section 227 of the Act;";

(g) by the insertion after the definition of "Document NAM-CATS-FCL 63" of the following definition:

""Document NAM-CATS-FPD" means a document on the Namibian Civil Aviation Technical Standards relating to Fight Procedure Design which is published by the Executive Director in terms of section 227 of the Act;";

(h) by the insertion after the definition of "Document NAM-CATS-GMR" of the following definition:

""Document NAM-CATS-MET" means a document on the Namibian Civil Aviation Technical Standards relating to Aeronautical Meteorological Services which is published by the Executive Director in terms of section 227 of the Act;";

(i) by the insertion after the definition of "Document NAM-CATS-PBN 90" of the following definitions:

""Document NAM-CATS-RPA" means a document on the Namibian Civil Aviation Technical Standards relating to Remote Piloted Aircraft and Remote Piloted Aircraft systems which is published by the Executive Director in terms of section 227 of the Act;

"Document NAM-CATS-SAR" means a document on the Namibian Civil Aviation Technical Standards relating to Search and Rescue operations which is published by the Executive Director in terms of section 227 of the Act;";

(j) by the insertion after the definition of "inspection" of the following definition:

"inspector" means a person designated as such under 37(1)(a) of the Act;";

(k) by the substitution for the definition of "register" of the following definition:

""register" means any register which is kept or required to be kept in terms of these regulations and which register forms part of the Civil Aviation Registry established in terms of section 52 of the Act;"; and

(l) by the insertion after the definition of "release to service" of the following definitions:

""remotely piloted aircraft (RPA)" means an unmanned aircraft which is piloted from a remote pilot station;

"remote pilot station" means the component of the RPA system containing the equipment used to pilot the RPA;

"RPA system" means a remotely piloted aircraft, its associated remote pilot station or stations, the required command and control links and any other components as specified in the type design.".

#### Amendment of regulation 1.00.2 of Regulations

**4.** Regulation 1.00.2 of the Regulations is amended by the insertion in the appropriate places of the list abbreviations of the following abbreviations:

- "(eA) A-MET means Aviation Meteorological Services;
- (eB) AIS means Aeronautical Information Services;
- (fA) ATEL means Aeronautical Telecommunications Services;
- (vA) FPD means Flight Procedure Design;
- (ttA) RPA means remotely piloted aircraft;".

#### **Insertion of Part 71 in Regulations**

5. The Regulations are amended by the insertion after Part 67 of the following Part:

# "PART 71 RULES OF THE AIR AND GENERAL OPERATING RULES: AIRSPACE AND AIR ROUTES

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# SUBPART 10:AIR NAVIGATION REGISTER

71.10.1 Air Navigation Register

#### SUBPART 1 GENERAL

#### **Definitions for this Part**

**71.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-AAR.

(2) For this Part, airspace and an aerodrome are associated if the airspace is used by aircraft arriving at or departing from the aerodrome.

#### Purpose

71.01.2 (1) This Part prescribes the requirements and methods to be used -

(a) when, in order to meet the requirements of Part 172 -

- (i) the airspace is to be classified so that appropriate air traffic services will be provided in the airspace; and
- (ii) a determination is to be made that certain air traffic services must be provided at an aerodrome and in airspace associated with that aerodrome;
- (b) to specify the boundaries of airspace that is to be, or will be used in a particular way; and
- (c) to decide whether a determination is to be made that -
- (i) broadcast requirements apply in particular airspace or at an aerodrome; and
- (ii) radio services must be provided at an aerodrome.

(2) This Part also provides for the Executive Director to, pursuant to section 38(6) of the Act, issue aviation directives on -

- (a) the use of airspace;
- (b) broadcasts that must be made in airspace and at aerodromes;
- (c) the use of air routes; and
- (d) conditions or restrictions that apply regarding the use of air routes.

#### Applicability

**71.01.3** (1) This Part applies to -

- (a) the classification and designation of airspace -
  - (i) in Namibia;
  - (ii) in the airspace over the high seas administered by Namibia;
  - (iii) in those portions of airspace over another State for which Namibia has accepted responsibility for the provision of air traffic services;
- (b) except as specified in subregulation(2), the development and establishment of air routes -
  - (i) in Namibia;
  - (ii) in the airspace over the high seas administered by Namibia;
  - (iii) in those portions of airspace over another State for which Namibia has accepted responsibility for the provision of air traffic services.
- (2) This Part does not apply to the creation of -
  - (a) terminal area air routes or procedures constructed under the provisions of Part 173; or

(b) air routes, terminal area air routes or procedures for use by military aircraft operating in airspace designated for use by the Namibia Defence Force.

#### SUBPART 2 AIRSPACE STANDARDS AND METHODS

#### Airspace classification: standards

- 71.02.1 The standards to be applied for airspace classification are -
- (a) the standards set out in this Part and in Document NAM-CATS-AAR; and
- (b) the provisions of Part 172 regarding the classification of airspaces.

#### Aerodrome services: standards

71.02.2 The standards to be applied for a determination that an air traffic service must be provided at an aerodrome are -

- (a) the standards set out in Document NAM-CATS-AAR; and
- (b) the provisions of Part 172 regarding the designation of the portions of the airspace and controlled aerodromes where air traffic services are provided.

#### Boundaries of designated airspace

**71.02.3** (1) Airspace boundaries, including airspace that is to be any of the following kinds, must be specified according to specifications set out in Document NAM-CATS-AAR -

- (a) a control area;
- (b) a control zone; and
- (c) airspace that is above or below a restricted area, or above a prohibited area or danger area.
- (2) The lateral limits of airspace designated under this Part are defined by -
- (a) geographical co-ordinates in degrees, minutes, and seconds; and
- (b) any one or more of the following:
  - (i) prominent geographical line features;
  - (ii) a circle or any part of a circle of specified radius around a geographical coordinate;
  - (iii) a great circle between two points; and
  - (iv) a parallel of latitude.

(3) The vertical limits of airspace designated under this Part are defined by heights, altitudes, or flight levels.

(4) Unless otherwise specified, the expression of a vertical limit to a height, altitude or flight level includes that height, altitude or flight level.

(5) Where airspace volumes of different classifications are contiguous vertically, an aircraft operating at that boundary level must be considered to be operating in, and subject to the rules of, the higher classification of airspace.

#### Airspace classification and aerodrome services: methods

71.02.4 The methods set out in Document NAM-CATS-AAR must be used for airspace classification, and for any of the following determinations:

- (a) that an air traffic service must be provided at an aerodrome;
- (b) that a flight information radio service must be provided at an aerodrome; and
- (c) that a control area or control zone is an area within which certain mandatory radio calls are required.

#### SUBPART 3 DESIGNATION OF AIRSPACES

#### General

**71.03.1** (1) If the Executive Director determines that an air traffic control service is required in a portion of airspace within a flight information region, the Executive Director must -

- (a) designate that portion of airspace as a control area or a control zone in accordance with this Subpart; and
- (b) classify that portion of airspace as Class A, B, C, D or E airspace in accordance with Subpart 4.

(2) If another ICAO contracting State provides an air traffic control service for any portion of airspace within the territorial airspace of Namibia, the Executive Director must -

- (a) designate that portion of airspace as a control area or a control zone in accordance with this Subpart after consulting with the other State; and
- (b) classify that portion of airspace as Class A, B, C, D or E airspace in accordance with Subpart 4.

(3) The Executive Director may designate portions of airspace within a control area or control zone as a specific sector to facilitate air traffic management.

(4) Except as provided in subregulation(5), a control area or control zone becomes uncontrolled class G airspace during those times when an air traffic control service is not being provided within that control area or control zone.

(5) The Executive Director may direct that when an air traffic control service is not being provided within a control area or control zone, that airspace be reclassified as restricted airspace area.

(6) For each portion of airspace designated as a control area or control zone, the Executive Director must specify the air traffic control unit that has responsibility for providing the air traffic control service within that control area or control zone and identify the control area or control zone.

# Flight information region

**71.03.2** (1) The Executive Director must publish in the aeronautical information publication (AIP), the flight information region established on the basis of the ICAO regional air navigation plan and which covers the whole of the air route structure to be served.

(2) The flight information region must include all airspace within its lateral limits.

(3) The Executive Director must publish the flight information region, airspace volume or air route structure in accordance with the aeronautical information regulation and control (AIRAC) cycle in an AIP, AIP Supplement or a notice to airmen (NOTAM).

# **Control areas**

**71.03.3** (1) The Executive Director must delineate control areas, including airways and terminal control areas so as to encompass sufficient airspace to contain the flight paths of those flights operating under instrument flight rules (IFR) or portions thereof, to which it is desired to provide the applicable parts of the air traffic control service, taking into account the capabilities of the navigation aids normally used in that area.

(2) The Executive Director may, in a control area other than one formed by a system of airways, establish a system of routes to facilitate the provision of air traffic control.

- (3) The Executive Director may specify a control area designated under this Part as -
- (a) a terminal control area, if the Executive Director determines that an approach control service is required at the confluence of air traffic services (ATS) routes in the vicinity of one or more major aerodromes;
- (b) an upper control area, if the Executive Director determines that an area control service is required; or
- (c) an oceanic control area, if the Executive Director determines that an area control service is required over the high seas.
- (4) The Executive Director must establish an upper limit of a control area when either -
- (a) an air traffic control service will not be provided above such upper limit; or
- (b) the control area is situated below an upper control area, in which case the upper limit must coincide with the lower limit of the upper control area.

(5) The upper limit of a control area in Namibia pursuant to subregulation (4) may not exceed flight level 460.

- (6) The lower limit of a control area must -
- (a) be at least 500 feet below the flight paths of instrument flight rules (IFR) flights that the Executive Director determines to require an air traffic control service;
- (b) be established at -
  - (i) the highest practical altitude; and
  - (ii) not less than 700 feet above ground or water;

- (c) when practicable and desirable, be established at a greater height than the minimum specified in paragraph (b)(ii) in order to allow freedom of action for flights operating under visual flight rules (VFR) below the control area; and
- (d) when the lower limit of a control area is above 3000 feet above mean sea level (AMSL), coincide with a VFR cruising altitude or flight level prescribed in Part 91.

(7) If a portion of airspace below a control area is designated as another control area, the upper limit of the lower control area must extend to the lower limit of the control area directly above it.

# **Control zones**

**71.03.4** (1) The Executive Director may designate as a control zone that portion of airspace around an aerodrome if -

- (a) the Executive Director determines that an aerodrome control service or an aerodrome and approach control service is required; and
- (b) the traffic density and pattern requires controlled airspace.

(2) A control zone must be as small as is practicable consistent with the need to protect the flight paths of IFR flights arriving at and departing from the aerodrome.

- (3) The lateral limits of a control zone must -
- (a) encompass at least those portions of the airspace that are not within a control area containing the paths of IFR flights arriving at and departing from the aerodrome under instrument meteorological conditions (IMC);
- (b) extend to at least five nautical miles from the centre of the aerodrome in the directions from which instrument approaches may be made; and
- (c) take into account the category of IFR aircraft using the aerodrome and the areas of airspace that need to be protected for those IFR flights.

(4) Prominent geographical features must be used, where practical, to define the lateral limits of a control zone.

(5) A control zone with an upper limit above 3000 feet AMSL must coincide with a VFR cruising altitude or flight level prescribed in Part 91.

(6) A control zone may include two or more aerodromes situated close together.

(7) If a control zone is located within the lateral limits of a control area, it must extend upwards from the surface of the earth to at least the lower limit of the control area.

(8) If a control zone is located outside of the lateral limits of a control area, an upper limit must be established.

- (9) If -
- (a) the Executive Director desires to establish the upper limit of a control zone at a level higher than the lower limit of the control area established above it; or

(b) the control zone is located outside of the lateral limits of a control area,

its upper limit must be established at a level which can easily be identified by pilots and when this limit is above 3 000 feet above mean sea level, it must coincide with a VFR cruising level as described in Part 91.

### VFR transit lanes

**71.03.5** (1) The Executive Director may designate a portion of controlled airspace as a visual flight rules (VFR) transit lane for either or both of the following purposes:

- (a) separating transiting VFR traffic from arriving and departing IFR flights; and
- (b) permitting transiting VFR traffic to operate within the VFR transit lane without requiring an air traffic control (ATC) clearance.

(2) A VFR transit lane must be clear of airspace that encompasses IFR arrival and departure procedures within that controlled airspace.

- (3) The Executive Director must -
- (a) ensure that buffer zones are provided between the nominal flight paths of arriving and departing IFR flights and each VFR transit lane; and
- (b) identify each VFR transit lane by the ICAO nationality letters of Namibia (FY) followed by the letter "T" followed by a number.
- (4) A VFR transit lane is class G airspace and may only be active during the day.

#### General aviation areas

**71.03.6** (1) The Executive Director may designate a portion of controlled airspace as a general aviation area for the purpose of allowing VFR flights access to a portion of previously controlled airspace without the requirement for an ATC clearance.

- (2) For each general aviation area, the Executive Director must -
- (a) specify, at the time that the Executive Director designates the airspace, which air traffic control unit has responsibility for providing the air traffic control service over the area;
- (b) identify the area by the ICAO nationality letters of Namibia (FY) followed by the letter G followed by a number; and
- (c) specify that the area is active -
  - (i) permanently during the day;
  - (ii) by approval of the ATC unit responsible for the airspace; or
  - (iii) by prior notification from an airspace user to the ATC unit responsible for the airspace.
- (3) A general aviation area -

- (a) may only be active during the day; and
- (b) is class G airspace while the area is active.

# Subsidiary airspace designations

**71.03.7** (1) If the Executive Director considers it necessary in the interests of aviation safety, air traffic management, or in accordance with international agreements, the Executive Director may designate any controlled airspace or portion of controlled airspace as any of the following:

- (a) Required Navigation Performance (RNP) airspace, on consideration of air traffic density and ATS route structure, and aircraft navigation system accuracy;
- (b) Performance Based Navigation (PBN) airspace, on consideration of air traffic density and ATS route structure, and aircraft navigation system accuracy;
- (c) Reduced Vertical Separation Minima (RVSM) airspace, on consideration of air traffic density and ATS route structure, and aircraft altimetry system accuracy;
- (c) Required Communication Performance (RCP) airspace, if and where established, on consideration of regional air navigation agreements and the types of ATS provided in the airspace concerned; and
- (d) Required Surveillance Performance (RSP) airspace, if and where established, on consideration of regional air navigation agreements and the types of ATS provided in the airspace concerned.

(2) The designation of subsidiary airspaces under subregulation (1) must take into account the requirements and standards for airspace safety and conformance monitoring prescribed in Part 172.

#### Identification of air traffic services units and airspaces

**71.03.8** (1) For each portion of airspace designated as a control area or control zone the Executive Director must specify the air traffic control unit that has responsibility for providing the air traffic control service within that control area or control zone and identify the control area or control zone in accordance with this Subpart.

(2) The Executive Director must pursuant to subregulation (1), publish in the AIP, the control areas and control zones designated under that subregulation, including the air traffic control units that have responsibility for providing air traffic control services within those control areas and control zones.

(3) An area control centre or flight information centre must be identified by the name of a nearby town or city or geographic feature.

(4) An aerodrome control tower or approach control unit must be identified by the name of the aerodrome at which it is located.

- (5) A control area or control zone must be identified by -
- (a) the ICAO nationality letters of Namibia (FY) followed by the letter "A" followed by a number; and

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- (b) the name of the air traffic control unit providing the air traffic control service within that control area or control zone.

# SUBPART 4 AIRSPACE CLASSIFICATION

### **Class A airspace**

**71.04.1** Any portion of airspace that is designated as a control area under regulation 71.03.3 or control zone under regulation 71.03.4 must be classified as Class A airspace, if the Executive Director considers it necessary in the interests of aviation safety that -

- (a) separation is required between all flights; and
- (b) VFR flights are not permitted.

# **Class B airspace**

**71.04.2** Any portion of airspace that is designated as a control area under regulation 71.03.3 or control zone under regulation 71.03.4 must be classified as Class B airspace, if the Executive Director considers it necessary in the interests of aviation safety that separation is required between all flights.

#### **Class C airspace**

**71.04.3** Any portion of airspace that is designated as a control area under regulation 71.03.3 or control zone under regulation 71.03.4 must be classified as Class C airspace, if the Executive Director considers it necessary in the interests of aviation safety that -

- (a) separation is required between -
  - (i) IFR flights;
  - (ii) IFR and VFR flights;
  - (iii) IFR and special VFR flights; and
  - (iv) special VFR flights when the flight visibility is reported to be less than five kilometres; and
- (b) traffic information must be provided to VFR flights about other VFR flights; and
- (c) traffic avoidance advice must be provided to VFR flights on request.

#### **Class D airspace**

**71.04.4** Any portion of airspace that is designated as a control area under regulation 71.03.3 or control zone under regulation 71.03.4 must be classified as Class D airspace, if the Executive Director considers it necessary in the interests of aviation safety that -

- (a) separation is required between -
  - (i) IFR flights;
  - (ii) IFR and special VFR flights; and

- (iii) special VFR flights when flight visibility is reported to be less than five kilometres.
- (b) traffic information must be provided to -
  - (i) IFR flights about VFR flights;
  - (ii) VFR flights about IFR flights; and
  - (iii) VFR flights about other VFR flights;
- (c) traffic avoidance advice must be provided to IFR and VFR flights on request.

# **Class E airspace**

**71.04.5** Any portion of airspace that is designated as a control area under regulation 71.03.3 must be classified as Class E airspace, if the Executive Director considers it necessary in the interests of aviation safety that -

- (a) separation is required between IFR flights; and
- (b) traffic information must be provided, where practical, to -
  - (i) IFR flights about VFR flights;
  - (ii) VFR flights about IFR flights; and
  - (iii) VFR flights about other VFR flights.

# **Class F airspace**

**71.04.6** The Executive Director may classify any portion of uncontrolled airspace as Class F airspace, if the Executive Director considers it necessary in the interests of aviation safety that -

- (a) IFR flights within the airspace need to receive an air traffic advisory service; and
- (b) all flights within the airspace should receive a flight information service if requested.

# **Class G airspace**

**71.04.7** The Executive Director may classify as Class G airspace any uncontrolled airspace that is not Class F airspace and where -

- (a) IFR flights are entitled to receive a flight information service; and
- (b) VFR flights are entitled to receive a flight information service on request.

# SUBPART 5 SPECIAL USE AIRSPACE

# General

**71.05.1** (1) The Executive Director may designate special use airspace under this Subpart, if the Executive Director considers such designation of special use airspace is necessary -

- (a) in the interests of the safety or security of civil aviation;
- (b) in the interests of national security; or
- (c) for any other reason in the public or national interest.

(2) The Executive Director must ensure that each portion of airspace designated under this Subpart is as small as is practicable consistent with the activities for which the area is required.

(3) Airspace designated by the Executive Director under this Subpart must be identified by an alphanumeric designator that is not being used to identify any other portion of airspace designated under this Part.

#### **Prohibited** areas

**71.05.2** (1) The Executive Director may declare a portion of airspace as a prohibited area to prohibit the activities of aircraft within that area.

(2) Where the Executive Director declares a portion of airspace as a prohibited area, he or she must -

- (a) specify the administering authority responsible for each prohibited area; and
- (b) identify each area by the ICAO nationality letters of Namibia (FY) followed by the letter "P" followed by a number.

#### **Restricted** areas

**71.05.3** (1) The Executive Director may designate a portion of airspace within the territorial limits of Namibia as a restricted area to restrict access to an area, or restrict the activities of aircraft within that area.

- (2) The Executive Director may impose conditions under which -
- (a) aircraft may be permitted to fly within that restricted area; and
- (b) the administering authority responsible for the restricted area must operate.
- (3) The Executive Director must -
- (a) specify the type of activity for which each restricted area is designated;
- (b) specify the administering authority responsible for each restricted area; and
- (c) identify each area by the ICAO nationality letters of Namibia (FY) followed by the letter "R" followed by a number.
- (4) The administering authority responsible for a restricted area -
- (a) must manage -
  - (i) the entry of aircraft into the restricted area;
  - (ii) the operation of aircraft within the restricted area; and

- (iii) the exit of aircraft from the restricted area;
- (b) must, if the restricted area is designated as being made active by a NOTAM, at least 24 hours before the restricted area is to become active, give to the NOTAM office notice of that restricted area becoming active, except that in the case of emergencies less than 24 hours' notice may be given; and
- (c) may, within any conditions imposed by the Executive Director under subregulation (2), impose conditions under which an aircraft may be operated within the restricted area.

#### **Danger areas**

**71.05.4** (1) The Executive Director may designate a portion of airspace as a danger area to notify operators that there is a potential danger to aircraft flying in the area.

- (2) The Executive Director must -
- (a) specify the nature of the danger for which each danger area is designated;
- (b) if the Executive Director considers it necessary, nominate a using agency as the contact point for a danger area; and
- (c) identify the area by the ICAO nationality letters of Namibia (FY) followed by the letter "D" followed by a number.
- (3) The using agency for a danger area must -
- (a) be a person or organisation that is responsible for the activity that necessitated the danger area being so designated;
- (a) ensure that the activities that necessitated the designation of the danger area are contained within that danger area; and
- (b) if the danger area is designated as being made active by a NOTAM, at least 24 hours before the danger area is to become active, give to the NOTAM office notice of that danger area becoming active, except that in the case of emergencies less than 24 hours' notice may be given.

#### Low flying zones

**71.05.5** (1) The Executive Director may designate a portion of airspace as a low flying zone where pilot training in low level manoeuvres may be conducted.

- (2) Where low flying zones have been designated, the Executive Director must -
- (a) publish in the AIP, arrangements and conditions for use of the low flying zones; and
- (b) identify each low flying zone by the ICAO nationality letters of Namibia (FY) followed by the letter "L" followed by a number.

#### Civil activity use airspace

**71.05.6** (1) The Executive Director may designate a portion of airspace for civil activity use airspace area where civilian aviation activities are to be conducted on a temporary or permanent basis.

(2) Where a civil activity use airspace area has been designated, the Executive Director must -

- (a) specify the nature of the activity for which each civil activity use airspace area is designated;
- (b) if necessary, nominate a using agency as the contact point for the area;
- (c) identify the area by the ICAO nationality letters of Namibia (FY) followed by the letter "A" followed by a number;
- (d) if necessary, issue a NOTAM for each temporary civil activity use airspace areas and publish an AIC; and
- (e) publish in the AIP, arrangements and conditions for use of the areas designated as permanent civil activity use airspace areas.

(3) In addition to the requirements of regulation 71.09.1, an application for the issuing of an approval to designate a civil activity use airspace area, must be -

- (a) made on the appropriate form determined by the Executive Director; and
- (b) accompanied by -
  - (i) the applicant's own comprehensive risk assessment;
  - (ii) written permission of the owner of the land over which the airspace is to de designated;
  - (iii) the aerodrome owner's permission when operations are within three kilometres of an aerodrome; and
  - (iv) the appropriate fees prescribed in Part 187.

(4) The Executive Director may, when approving a designation, include any conditions as may be considered necessary in the interest of aviation safety.

(5) The Executive Director may refuse to grant an approval to designate a civil activity use airspace area, and where the application is refused, the Executive Director must notify the applicant in writing, indicating the reasons for the refusal.

- (6) The using agency for civil activity use airspace area must -
- (a) be a person or organisation that is responsible for the activity that necessitated the civil activity use airspace area being so designated;
- (b) ensure that the activities that necessitated the designation of the civil activity use airspace area are contained within that area; and
- (c) if the area is designated as being made active by NOTAM, at least 24 hours before the civil activity use airspace area is to become active, give to the NOTAM office notice of that designated area becoming active, except that in the case of emergencies less than 24 hours' notice may be given.

# Details to be entered into register

71.05.7 The Executive Director must enter details regarding any airspace designated as special use airspace into the register as provided for in Subpart 10.

#### SUBPART 6 REQUIREMENTS SUPPORTING ATC SURVEILLANCE

#### Transponder mandatory airspace within controlled airspace

**71.06.1** (1) The Executive Director may designate a control area or a control zone, or any portion of a control area or a control zone, as transponder mandatory airspace if -

- (a) the operation of transponders is required for the provision of an air traffic control surveillance service; or
- (b) the Executive Director determines that the traffic density in the airspace requires the operation of transponders to reduce the risk of an airborne collision with those aircraft that are required to be fitted with an airborne collision avoidance system.

(2) The Executive Director may require the carriage and operation of Mode A, Mode C or Mode S transponders in airspace designated under subregulation (1).

#### Transponder mandatory airspace within special use airspace

**71.06.2** The Executive Director may designate any portion of special use airspace as transponder mandatory airspace, if the Executive Director determines that the traffic density in the airspace requires the operation of transponders to reduce the risk of an airborne collision with those aircraft that are required to be fitted with an airborne collision avoidance system.

# Operation of automatic dependent surveillance: broadcast (ADS-B) equipment within controlled airspace

**71.06.3** The Executive Director may designate a control area or a control zone, or any portion of a control area or a control zone, as airspace within which the carriage and operation of automatic dependent surveillance: broadcast (ADS-B) transponders is mandatory, if the operation of ADS-B transponders is required for the provision of an air traffic control surveillance service.

#### SUBPART 7 AIR ROUTES

#### **Establishment of air routes (ATS routes)**

- 71.07.1 (1) The Executive Director must -
- (a) establish standards and procedures for the development and promulgation of -
  - (i) air routes (ATS routes) for use by instrument flight rules (IFR) aircraft within the airspace of Namibia and within international airspace for which Namibia has accepted responsibility;
  - (ii) standard arrival or departure routes to facilitate the transition between enroute airspace and terminal area airspace in the vicinity of airports;
  - (iii) routes to be flown by VFR aircraft, where required.

- (b) publish those standards and procedures in Document NAM-CATS-AAR.
- (2) The Executive Director must -
- (a) establish standards and procedures for the determination and promulgation of minimum IFR altitudes associated with air routes established under subregulation (1)(a)(i); and
- (b) publish those standards and procedures in Document NAM-CATS-AAR.

### SUBPART 8 MISCELLANEOUS

#### **Reporting points**

**71.08.1** (1) The Executive Director may designate visual or instrument flight rules reporting points for the purpose of facilitating the -

- (a) requirements of air traffic services for information regarding the progress of aircraft in flight;
- (b) provision of weather reports; or
- (c) safe conduct of flight by visual reference.
- (2) The Executive Director may designate certain reporting points as -
- (a) mandatory reporting points;
- (b) changeover points; or
- (c) significant points.
- (3) The Executive Director must ensure that visual reporting points -
- (a) are based on prominent geographical features; and
- (b) are identified by names or designators that -
  - (i) are easily recognisable in voice communications;
  - (ii) will not be confused with those of other reporting points in the same general area; and
  - (iii) do not create confusion with other communications exchanged between pilots and between air traffic services and pilots.

#### Area QNH zones

**71.08.2** The Executive Director may designate as an area QNH(Q code) zone those portions of airspace from the surface of the earth to a specified altitude within which a common area QNH altimeter setting (an altimeter sub-scale setting to obtain elevation when on the ground) must be used.

# **Military operating zones**

**71.08.3** (1) The Executive Director may despite the fact that a military operating zone may be designated as a prohibited, restricted or danger area in accordance with regulations 71.05.2, 71.05.3 and 71.05.4, respectively -

- (a) designate a portion of airspace as a military operating area to segregate military activities from other traffic; and
- (b) impose conditions under which -
  - (i) aircraft may be permitted to fly within that military operating area; and
  - (ii) an administering authority specified under subregulation (2)(b) must operate.
- (2) The Executive Director must -
- (a) specify the type of activity for which each military operating area is designated;
- (b) specify the administering authority responsible for each military operating area; and
- (c) identify each military operating area by the ICAO nationality letters of Namibia (FY) followed by the letter "M" followed by a number.
- (3) The administering authority responsible for a military operating area -
- (a) must manage -
  - (i) the entry of aircraft into the military operating area;
  - (ii) the operation of aircraft within the military operating area; and
  - (iii) the exit of aircraft from the military operating area;
- (b) if the military operating area is designated as being made active by NOTAM, must at least 24 hours before the military operating area is to become active, give to the NOTAM office notice of that military operating area becoming active, except that in the case of emergencies less than 24 hours' notice may be given; and
- (c) may, within any conditions imposed by the Executive Director under subregulation (1)(b)(ii), impose conditions under which any aircraft may be operated within the military operating area.

#### Mandatory broadcast zones

**71.08.4** (1) The Executive Director may designate a portion of uncontrolled airspace as a mandatory broadcast zone if, due to traffic density or special circumstances, the pilots within that zone are required to make radio broadcasts of their position and intentions.

- (2) The Executive Director must -
- (a) identify each mandatory broadcast zone by the ICAO nationality letters of Namibia (FY) followed by the letter "B" followed by a number;
- (b) assign the radio frequency to be used within the mandatory broadcast zone for the mandatory radio broadcasts; and

(c) determine the maximum interval between a pilot's mandatory radio broadcasts.

#### **Designation of volcanic hazard zones**

**71.08.5** (1) The Executive Director may designate a portion of airspace as a volcanic hazard zone if volcanic activity, which includes flying rocks, gas plumes, and ash clouds may present a hazard to aircraft.

(2) Where designated, the Executive Director must identify each volcanic hazard zone by the ICAO nationality letters of Namibia (FY) followed by the letter "V" followed by a number.

# SUBPART 9 ADMINISTRATION

#### Application for designation and classification of airspace

**71.09.1** (1) The following persons and entities may apply to the Executive Director for a designation or classification of airspace under this Part -

- (a) the Government of Namibia;
- (b) the Air Navigation Services established under section 49 of the Act;
- (c) the Namibia Defence Force;
- (d) a person who is to provide air traffic services under Part 172;
- (e) a person who is an administering authority;
- (f) a person who is a using agency;
- (g) any other person or entity that is able to demonstrate to the Executive Director that he, she or it has substantial interest in the designation or classification of the airspace.
- (2) An applicant for an airspace designation or classification must provide the following

details:

- (a) the name and contact details of the applicant;
- (b) the type of designation or classification required;
- (c) the reason for the designation or classification;
- (d) the dimensions or other boundary information for the airspace that is required;
- (e) the period for which the designation or classification is required;
- (f) the contact details of any applicable administering authority or using agency; and
- (g) any other applicable information required by the Executive Director.
- (3) Except for urgent requests that are associated with -
- (a) police operations;

- (b) search and rescue operations;
- (c) aviation security; or
- (d) other emergency situations,

an application for an airspace designation or classification must be submitted to the Executive Director not less than 90 days before the date on which the designation or classification is to come into force, unless a shorter period is acceptable to the Executive Director.

# Procedure for designation and classification of airspace

**71.09.2** (1) For each designation or classification of airspace made under this Part, the Executive Director must specify -

- (a) the period that the designation or classification is active; or
- (b) the method by which the designation or classification is made active.

(2) Except as provided in subregulation (4), designations and classifications of airspace, and designations of reporting points, area QNH zones, and other designations made under this Part do not come into force until -

- (a) those designations and classifications are entered into the register; and
- (b) the details of those designations and classifications are published in an AIP or by a NOTAM.

(3) Except as provided in subregulation (5), the Executive Director must ensure that each of the following is registered in the register -

- (a) a designation of airspace;
- (b) a classification of airspace;
- (c) a designation of a reporting point; and
- (d) a designation of an area QNH zone.
- (4) A designation or classification of airspace for an urgent request that is associated with -
  - (a) police operations;
  - (b) search and rescue operations;
  - (c) aviation security; or
  - (d) other emergency situations,

may be brought into force immediately, without the need to publish the information in the AIP or by a NOTAM, but such NOTAM must be issued as soon as possible after the activation.

(5) A designation or classification of airspace that is of a temporary nature, or will be effective for a period of not more than six months need not be entered into the register.

# Delegation of responsibility for temporary designation or classification of airspace

**71.09.3** (1) Despite any provisions made for the administration of this Part as a whole, the Executive Director may issue delegations of responsibility for designation or classification of airspace to an appropriate person or persons.

(2) Where a delegation has been issued under subregulation(1), it may only be used to designate or classify airspace which -

- (a) may be required to facilitate police operations, search and rescue operations, security, or other emergency or non-standard situations;
- (b) is of a temporary nature, or will be effective for a period of not more than 30 days; and
- (c) cannot be coordinated within the expected timeframe through the normal airspace designation or classification processes.

(3) Delegations issued under subregulation (1) will be for a period of time determined by the Executive Director.

(4) Where a designation or classification of airspace under subregulation (2) has been made, the Executive Director must be informed as soon as possible.

(5) The temporary designation or classification of airspace must be removed once it has been determined that it is no longer needed or is no longer appropriate.

### Review of designated and classified airspace

**71.09.4** The Executive Director may, at least every five years, review each current airspace designation and classification to verify the continuing need for the airspace designation or classification.

#### Withdrawal of designations and change of airspace classification

**71.09.5** (1) If the Executive Director is satisfied that a designation, or a classification, that has been made under this Part is no longer needed or is no longer appropriate, the Executive Director may withdraw the designation or alter the classification.

(2) Except as provided in subregulation (3), the withdrawal of an airspace designation or the change of an airspace classification made under subregulation (1) does not come into force -

- (a) until that withdrawal or change is entered in the register;
- (b) the details are published in an AIP Supplement or by a NOTAM; and
- (c) the details in the register are amended.

(3) The withdrawal or change in the register required under subregulation (2)(a) must specify the date that the withdrawal of an airspace designation or the change of an airspace classification comes into force.

(4) Subregulation(2)(b) does not apply to an airspace designation or an airspace classification that has been in force for a period of not more than six months.

# Application for designation of air route

**71.09.6** (1) The following entities and persons may apply to the Executive Director for a designation of an air route (ATS route) under this Part:

- (a) the Air Navigation Services established under section 49 of the Act;
- (b) a person who is to provide air traffic services under Part 172;
- (c) any other person as may be determined by the Executive Director.
- (2) An applicant for an air route designation must provide the following details:
- (a) the name and contact details of the applicant;
- (b) the details of the ATS route including route identifier, reporting points, and minimum levels;
- (c) the reason for the designation;
- (d) the period for which the designation or classification is required if the route is temporary; and
- (e) any other applicable information required by the Executive Director.

(3) The entity or person applying for an ATS route designation must submit the application to the Executive Director not less than 90 days before the date on which the designation is to come into force unless a shorter period is acceptable to the Executive Director.

#### Procedure for designation of ATS routes

**71.09.7** (1) For each designation made under this Subpart, the Executive Director must specify -

- (a) the period that the designation or classification is active; or
- (b) the method by which the designation is made active.

(2) Designations made under this Part do not come into force until those designations and classifications are -

- (a) entered into the register established in terms of Subpart 10;
- (b) the details are published in the AIP or by a NOTAM; and
- (c) the ATS route is depicted on the relevant aeronautical chart.

#### SUBPART 10 AIR NAVIGATION REGISTER

#### Air Navigation Register

**71.10.1** (1) The Executive Director must establish and maintain a register called "Air Navigation Register" (register).

(2) The Executive Director must ensure that the register contains the following information:

- (a) a current description of volume portion of airspace that is designated under this Part;
- (b) a current description of the boundary information of each volume of airspace that is classified by the Executive Director as a class of airspace under this Part;
- (c) a current description of each volume of airspace within which certain operating rules apply;
- (d) a current description of any special use airspace designated under this Part;
- (e) current information, including the name or designator and coordinates of each reporting point designated under this Part;
- (f) the details of each air route designated under this Part;
- (g) the details required by Part 173 for each current instrument flight procedure;
- (h) the details for every right-hand aerodrome traffic circuit for which a determination has been issued under Part 91; and
- (i) the details of all certificates, approvals, designations or authorisations issued in terms of Parts 170,171,172, 173, 174 and 175.

(3) The register forms part of, and must comply with the requirements and related measures for documents and information of, the Civil Aviation Registry required under section 52 of the Act.".

#### Substitution of Part 101 of Regulations

6. The Regulations are amended by the substitution for Part 101 of the following Part:

# "PART I01 RULES OF THE AIR AND GENERAL OPERATING RULES: OPERATION OF REMOTELY PILOTED AIRCRAFT

#### LIST OF REGULATIONS

# **SUBPART 1: GENERAL**

- 101.01.1 Definitions for this Part
- 101.01.2 Applicability

### SUBPART 2: CLASSIFICATION OF RPA AND RPA SYSTEMS

- 101.02.1 Classification of RPA and RPA systems
- 101.02.2 Additional requirements for Category III RPA and RPA systems

# SUBPART 3: APPROVAL OF RPA AND RPA SYSTEM OPERATIONS

- 101.03.1 Requirement for approval of RPA and RPA system operation
- 101.03.2 Application for approval or amendment or extension of approval
- 101.03.3 Requirements for application

101.03.4	Issue of RPA	approval

- 101.03.5Duplicate approval
- 101.03.6Display of approval
- 101.03.7 Privileges of RPA approval holder

# SUBPART 4: OTHER REQUIREMENTS RELATING TO RPA AND RPA SYSTEMS

101.04.1 Import, manufacture, assembly and testing

# SUBPART 5: OPERATION OF RPA AND RPA SYSTEMS

- 101.05.1 General: operations
- 101.05.2 RPA flight rules
- 101.05.3 Rockets
- 101.05.4 Restrictions on use of RPA and RPA systems
- 101.05.5 Flight plans-air space requirements
- 101.05.6 Collision avoidance
- 101.05.7 Reporting of RPA and RPA system incidents and accidents
- 101.05.8Air traffic control communication
- 101.05.9 Operations in vicinity of aerodromes

# **SUBPART 6: GENERAL PROVISIONS**

- 101.06.1 Records and documents
- 101.06.2 Insurance

#### SUBPART I GENERAL

# **Definitions for this Part**

**101.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-RPA.

(2) For the purposes of this Part -

"approval" means an authorisation granted by the Executive Director under this Part, authorising a person to carry out a specified RPA or RPA system operation or to do any other thing in connection with or that is related to a RPA or RPA system operation;

"beyond visual line-of-sight (BVLOS) operation" means an operation of a RPA system in which the remote pilot or RPA observer cannot maintain direct unaided visual contact with the RPA in the manner described in the current updated version of the ICAO Manual on Remotely Piloted Aircraft Systems (Document 10019);

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

"RPA observer" means a trained and competent person designated by the operator who, by visual observation of a RPA, or a RPA system, assesses the remote pilot in the safe conduct of the flight, and for such purposes, the observer may be an inspector, authorised officer or authorised person designated by the Executive Director; and

"visual line-of-sight (VLOS) operation" means an operation in which the remote pilot or a RPA observer maintains direct unaided visual contact with the remotely piloted aircraft.

# Applicability

**101.01.2** (1) This Part -

- (a) applies to the operation of unmanned free balloons, kites, rockets and remotely piloted aircraft; and
- (b) contains -
  - (i) in addition to the provisions of the regulations in Part 91, the operating and flight rules relating to the operations described in paragraph (a); and
  - (ii) the exceptions or variations to the general operating and flight rules prescribed in Part 91.
- (2) This Part does not apply to -
- (a) RPA operations that constitute an air service within the meaning of the Air Services Act, 1949 (Act No. 51 of 1949);
- (b) operations utilising a RPA or RPA system separately from commercial air transport services;
- (c) recreational use RPA provided that -
  - (i) such use is not within an aerodrome and not less than 1500 metres from the aerodrome boundaries;
  - (ii) it meets the restriction, prohibition, or danger areas requirements wherever or whenever designated; and
  - (ii) such use is not in or around any key points as described in Document NAM-CATS-RPA; and
- (d) RPA or RPA systems, when used for purposes of -
  - (i) military, police and related security operations; and
  - (ii) environmental protection actions of national game parks or reserves.

# SUBPART 2 CLASSIFICATION OF RPA AND RPA SYSTEMS

#### **Classification of RPA and RPA systems**

**101.02.1** (1) RPA or RPA systems are classified and categorised by weight and use for the purposes of this Part, for use as follows:

- (a) Category I:
  - (i) recreational operation of RPA which refers to a RPA operation for individual, personal, casual and private purposes, within the confines of the private property of the operator, and where -
    - (aa) there is no commercial reward or gain; and

- (bb) the operation excludes public, sporting or academic research RPA usage; and
- a person intending to operate a RPA or RPA system recreational operation outside the boundaries of the private property of the operator, and in excess of the height or VLOS requirements set out in this Part, must apply for an approval under paragraph (b), Category II, and must conduct such operation in accordance with conditions set out in the approval;
- (b) Category II: sports, recreational and research operations, including operations for purposes of tourism, of a RPA or RPA system, which refers to any operation of a RPA or RPA system for the sole purpose of organised leisure, competition, entertainment or games, and where there is no commercial reward or gain, subject to the payment of the fee prescribed under Part 187 for this category; and
- (c) Category III: commercial operation of a RPA or RPA system which refers to any operation under either paragraph (a) or (b), but for purposes of business, and for remuneration, hire, reward or gain, subject to the payment of the fee prescribed fee under Part 187 for this category.

(2) For the purposes of this regulation a RPA or RPA system is considered to be used in a recreational operation if the RPA is -

- (a) less than 250 grammes in gross weight;
- (b) not powered by any fuel system;
- (c) not capable of carrying any payload;
- (d) not fitted with a camera or other similar recording device; and
- (e) operated at a maximum height of 120 metres above ground level and at a lateral distance of 50 metres from the operator and a maximum speed of 10 knots.

# Additional requirements for Category III RPA and RPA systems

**101.02.2** (1) An operator or owner of a Category III RPA or RPA system must demonstrate to the Executive Director -

- (a) an adequate organisation for the purposes of the commercial operation;
- (b) a level of accountability for purposes of a commercial operation;
- (c) a method of control and supervision of flight operations, training programmes as well as ground handling and maintenance arrangements under the approval;
- (d) safety management actions consistent with the nature and extent of the operations specified and commensurate with the size, structure and complexity of the organisation as required under Part 140; and
- (e) any other requirement for safe and secure operations under this category.

(2) A person may not own, register or seek approval to operate a RPA or RPA system that has military, police or intelligence specifications, unless that person has been authorised in writing by the Executive Director to conduct the operation.

# SUBPART 3 APPROVAL OF RPA AND RPA SYSTEM OPERATIONS

# Requirement for approval of RPA and RPA system operation

**101.03.1** A person may not carry out a Category II or III RPA or RPA system operation outside the property of the owner or operator except, under the authority of, and in accordance with the provisions of an approval issued under this Part, and the standards set out in Document NAM-CATS-RPA.

# Application for approval or amendment of approval

**101.03.2** (1) A person may apply to the Executive Director for the issue or amendment of an approval to operate a RPA or RPA system operation for use in Namibia whether or not the commencing operation is inside or outside of Namibia.

- (2) An application under subregulation (1) must be -
- (a) made in the appropriate form set out in Document NAM-CATS-RPA; and
- (b) accompanied by proof of the payment of the appropriate fee prescribed under Part 187.

(3) An application under subregulation(1) must be made within the following periods prior to the commencement date of the operation:

- (a) Category II: 15 days; and
- (b) Category III: 30 days.

(4) The Executive Director may allow for alternative periods of an application under subregulation (3) on good cause shown by the applicant which is acceptable to the Executive Director.

(5) An approval issued under this Part must be specific to a particular RPA or RPA system operation and is valid for the period of the specific operation only unless the Executive Director extends its validity up to a maximum of 12 months.

(6) An application for an approval requiring conversion to another RPA category must be considered as a new application for that RPA category.

- (7) Where an application for conversion is made under subregulation (1) -
- (a) the fee which accompanied the original application is not refundable to the applicant; and
- (b) the original application must be considered as valid until such time that the conversion to a new RPA category application becomes effective.

# **Requirements for application**

**101.03.3** (1) Unless otherwise specified by the Executive Director, an application for an approval to operate or use a RPA or RPA system, must include the following:

(a) the name and contact information of the operator and, where relevant, the owner;

- (b) the technical characteristics of the RPA, including the type of aircraft, maximum certificated take-off mass, and where relevant, number of engines and other attachments;
- (c) a certified copy of certificate of registration or airworthiness, where relevant;
- (d) aircraft identification to be used in radiotelephony, where relevant;
- (e) a copy of the RPA operator certificate, currently valid, issued by the appropriate authority of another State, where applicable;
- (f) a copy of the remote pilot competency certificate, where relevant;
- (g) a copy of the aircraft radio station licence, if applicable;
- (h) a description of the intended operation, including type of operation or purpose, and flight rules, visual line-of-sight or beyond visual line of sight (VLOS or BVLOS) operation, if applicable, date of intended flight, point of departure, destination, cruising speed, cruising level, route to be followed and duration or frequency of flight;
- (i) command and control (C2) link failure procedure;
- (j) remote pilot or RPA observer communications failure, if applicable;
- (k) number and location of remote pilot stations as well as handover procedures between remote pilot stations, if applicable;
- (l) document attesting noise and emissions certification, if applicable;
- (m) payload information or description, if applicable;
- (n) proof of adequate insurance liability, including third party insurance coverage; and
- (o) proof of registration as a surveyor, for purposes of commercial aerial and survey mapping, where applicable.

(2) Where the documents listed in subregulation (1) are issued in a language other than English, the applicant for an approval must ensure that a sworn English translation is included.

#### **Issue of RPA approval**

**101.03.4** (1) The Executive Director may issue a RPA approval, if the Executive Director is satisfied that -

- (a) the applicant meets the requirements prescribed in this Part;
- (b) the applicant's personnel required by this Part are competent to perform their respective duties; and
- (c) the issuing of the approval is not contrary to the interests of aviation safety.

(2) The RPA approval referred to in subregulation (1) must be issued in the appropriate form, and contain the information, set out in Document NAM-CATS-RPA.

#### **Duplicate approval**

**101.03.5** (1) If a RPA approval is lost, stolen, damaged or destroyed, the holder may apply to the Executive Director for the issue of a duplicate approval.

- (2) An application referred to in subregulation (1) must be -
- (a) made in the appropriate form set out in Document NAM-CATS-RPA; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(3) A duplicate of the approval is issued on the appropriate form set out in Document NAM-CATS-RPA.

#### **Display of approval**

**101.03.6** (1) A holder of a RPA approval must display the approval, or a copy of it, in a conspicuous place, generally accessible to the public at such holder's principal place of business.

(2) Where a copy of the approval in Catogory II or III is displayed under subregulation (1), the holder of the approval must produce the original approval, if so requested by an authorised officer, inspector or authorised person.

#### Privileges of RPA approval holder

**101.03.7** The privileges of a RPA approval holder are limited to the services authorised by the approval and the appropriate specifications set out in Document NAM-CATS-RPA.

# SUBPART 4

#### OTHER REQUIREMENTS RELATING TO RPA AND RPA SYSTEMS

#### Import, manufacture, assembly and testing

**101.04.1** (1) A person may not import or export a RPA or RPA system, or a component thereof, unless that person has complied with the requirements of the Customs and Excise Act of 1998, as specified in Document NAM-CATS-RPA.

(2) Any person intending to manufacture, assemble, modify or test a RPA or RPA system or a component of it, must ensure compliance with requirements of the State of Design, State of Manufacture, State of Import or State of Registration to the extent required by the Executive Director and in compliance with the requirements, where relevant, set out in NAM-CATS-RPA or NAM-CATS-AR.

(3) The Executive Director may require a RPA or RPA system of a certain class and category with a type certificate to obtain a certificate of airworthiness in accordance with Part 21, 34 or 36.

# SUBPART 5 OPERATION OF RPA AND RPA SYSTEMS

#### **General: operations**

**101.05.1** (1) A person may not operate a RPA or RPA system flight commencing at a place within Namibia and terminating at a place outside Namibia, unless that person has authorisation from the State of destination and any other State over whose airspace the RPA must fly.

(2) A person may not launch a RPA flight or RPA system flight commencing at a place outside Namibia and terminating at a place within Namibia or overflying the Namibian airspace, unless that person has obtained approval from the Executive Director.

# **RPA flight rules**

**101.05.2** (1) A person who is in charge of the operation of a RPA or RPA system may not operate or permit that aircraft to be operated -

- (a) so as to cause a hazard to other aircraft;
- (b) in the vicinity of aircraft manoeuvring in an aerodrome traffic circuit;
- (c) in such a manner or within a distance that may endanger or obstruct traffic that is using a public road as defined in the Road Traffic and Transport Act, 1999 (Act No. 22 of 1999); or
- (d) in a negligent or reckless manner so as to endanger life or cause damage to the property of others.
- (2) A RPA must give way to manned aircraft and must have the capability to -
- (a) be halted in mid-air;
- (b) be re-routed to another waypoint; and
- (c) change present flight levels.

(3) The Executive Director may define areas within air traffic services airspace, where RPA activity may, subject to the requirements of Part 173, take place.

(4) A person who is in charge of the operation of a RPA which has a mass of less than 25 kilograms, without fuel but including-

- (a) any articles or equipment installed in or attached to the aircraft; and
- (b) cargo,

at the commencement of its flight, may not allow such an aircraft to be flown in the manner described in subregulation (5).

- (5) The RPA referred to in subregulation (4) may not be flown -
- (a) within a prohibited area, restricted area or controlled airspace, without specific approval from the Executive Director;
- (b) in air traffic services airspace, other than controlled airspace, within three kilometres of an aerodrome during periods of aircraft operations, unless the aerodrome operator has given permission for the flight to be undertaken;
- (c) at any distance from a person, vessel, vehicle or structure, unless the RPA is flown under the direct control of the operator or the owner;
- (d) at any distance from an assembly of persons, unless the RPA is flown under the direct control of the operator or owner and only with an approved fail safe system and with the approval of the Executive Director;

- (e) beyond direct unaided visual line of sight (BVLOS) and not further than 300 metres from the point of operation, unless specifically approved by the Executive Director for BVLOS operations;
- (f) at a height of more than 50 metres above the ground or water, unless the flight is approved by the Executive Director; or
- (g) in such a manner as to allow or permit any article or animal, including a bullet or missile, whether or not attached to a parachute or free balloon to be released from that aircraft.

(6) A person who is in charge of the operation of a RPA or RPA system may not allow such aircraft to be operated from any place, unless the aircraft may take-off and land without undue hazard to persons or property.

(7) A person who is in charge of the operation of a RPA or RPA system, which has a mass of four kilograms or more, without fuel but including -

- (a) any articles or equipment installed in or attached to the aircraft; and
- (b) cargo,

at the commencement of its flight, may not allow such an aircraft to be flown, unless that person has successfully undertaken a course of remote aircraft-related handling, safety, and emergency procedures training acceptable to the Executive Director.

(8) A person who is in charge of the operation of a RPA or a RPA system carrying goods, including -

- (a) any articles or equipment installed in or attached to the aircraft; and
- (b) cargo,

at the commencement of its flight, may not allow such an aircraft to be flown, unless the person has been granted approval by the Executive Director to do so and subject to such conditions as are required by such approval.

#### Rockets

**101.05.3** In the case of a rocket, an operation, other than for military purposes, may not be conducted within Namibia unless the person who is in charge of the operation -

- (a) furnishes such pertinent information as may be required by the Executive Director on the operation;
- (b) obtains approval from the Executive Director prior to the launching of the rocket; and
- (c) complies with such conditions as are imposed in that approval.

#### **Restrictions on use of RPA and RPA systems**

**101.05.4** (1) The Executive Director may decline an application for approval to operate a RPA or RPA system and may prohibit such an operation if it appears that it would not be in the interest of aviation safety and security to allow that operation to proceed.

(2) The Executive Director or an authorised officer, inspector or authorised person may at any time during the operations of a RPA or RPA system, subject the RPA or RPA system to inspection without prior notification to the operator or owner.

(3) A person engaged in RPA and RPA system operations is subject to security background checks and, where necessary, vetting, in accordance with the requirements of section 134 of the Act and Part 114.

- (4) A person may not use a RPA or RPA system to -
- (a) conduct surveillance of another person, unless that other person has given his or her consent to the surveillance;
- (b) conduct surveillance of movable or immovable property of any person, unless the owner of the property has given his or her consent to the surveillance;
- (c) photograph or film any person, for the purpose of publishing or otherwise publicly disseminating the photograph, unless that person has given his or her consent to the photographing or filming.

(5) RPA or RPA system usage under this Part allows for newsgathering, or events or places to which the general public is invited and in such manner participate provided that the required approvals from the Executive Director or the Head of Air Navigation Services, as the case maybe, are obtained and all generally accepted aviation safety and security considerations are complied with.

(6) Infrared or other similar thermal imaging technology equipment fitted on a RPA or RPA system, subject to the requirements in this Part, must be set-up as part of the RPA or RPA system, for purposes of -

- (a) scientific research and investigation;
- (b) mapping and evaluating the earth's surface, including terrain and surface water bodies and other features;
- (c) investigation or evaluation of crops, livestock or farming operations;
- (d) investigation of forests and for estate management; or
- (e) fire fighting, police, search and rescue, or crime investigations.

(7) If it appears to the Executive Director, or an authorised officer, inspector or authorised person that a RPA or RPA system is intended to be or is likely to be flown from any place within Namibia and that there would be a contravention of any provision of the Act, or these regulations, if that RPA were to be so flown, the Executive Director may direct -

- (a) the registered owner or operator of the RPA or RPA system;
- (b) the person who is in charge of that RPA or RPA system;
- (c) the person designated by the registered owner or operator thereof to be in charge of that RPA or RPA system; or
- (d) any other person having charge or purporting to have charge of that RPA, with or without the permission of the registered owner or the legitimate operator of that RPA or RPA system,

that he or she may not to permit or cause the RPA or RPA system to make the flight and the Executive Director may take such steps as are necessary to seize and detain that RPA at a suitable location.

# Flight plans: airspace requirements

**101.05.5** (1) A RPA or RPA system operator of BVLOS flights and flights in airspace higher than 120 metres must file a flight plan with the nearest ATC as specified in the following conditions:

- (a) flights in controlled airspace must file flight plans as specified for in the Aeronautical Information Publication (AIP); and
- (b) flights in uncontrolled air space higher than 120 metres must file flight plans as follows:
  - (i) operations within five kilometres out of launch area must notify the nearest ATC; and
  - (ii) operations beyond five kilometres out of launch must file flight plans as stipulated in paragraph (a) and in accordance with the requirements set out in Document NAM-CATS-RPA.

#### **Collision avoidance**

**101.05.6** (1) A RPA or RPA system in controlled airspace must be operated in accordance with the Rules of the Air prescribed in Part 91, and in compliance with following:

- (a) a remote pilot must maintain awareness so as to detect and avoid other aircraft and vehicles and must yield the right-of way to all aircraft;
- (b) yielding the right-of-way means that the RPA or RPA system must give way to the aircraft and may not pass over, under, or ahead of it unless well clear; and
- (c) a RPA or RPA system operating in mixed use airspace must have detect and avoid capability.

(2) A person may not operate a RPA or RPA system so close to another aircraft so as to create a collision hazard.

#### Reporting of RPA and RPA system incidents and accidents

**101.05.7** (1) A RPA or RPA system owner or operator must ensure that all incidents and accidents involving a RPA or RPA system and which cause damage to property, injuries or death, are reported to the Executive Director, and to the Directorate in accordance with the provisions of Part 11 of the Act.

(2) A RPA and RPA system owner or operator in Categories II and III must develop and implement emergency and contingency procedures acceptable to the Executive Director.

(3) A RPA and RPA system owner or operator in Categories II and III must have response procedures for operations personnel for threats and incidents involving RPA operations in compliance with the requirements set out in Document NAM-CATS-RPA.

(4) A RPA and RPA system owner or operator in Categories II and III must ensure that reports on acts of unlawful interference are promptly submitted to the Executive Director in compliance with the requirements set out in Document NAM-CATS-RPA.

# Air traffic control communication

**101.05.8** (1) A RPA or RPA system owner or operator must ensure that air traffic control (ATC) is made aware of any operations that takes or will take place in areas which are likely to affect manned and controlled air traffic.

(2) Subject to compliance with the applicable requirements of Part 170, a RPA and RPA system owner or operator must, in compliance with the procedures set out in Document NAM-CATS-RPA integrate, the RPA operations into the airspace to ensure aviation safety and such procedures must include communication and surveillance detection.

(3) Procedures referred to in subregulation (2) must specify that the operator or person in charge of the RPA or RPA system must, before and during RPA operations, pass on the required information to the air traffic control services provider.

# Operations in vicinity of aerodromes and airports

**101.05.9** (1) Except with the permission of the owner or operator of an aerodrome or airport, and subject to the requirements of the appropriate air navigation services provider, a person may not operate a RPA or RPA system -

- (a) from the aerodrome or airport reference point;
- (b) in approach and take-off paths;
- (c) within the vicinity of navigation aids;
- (d) within the aerodrome traffic zone; and
- (e) within terminal traffic holding patterns.

(2) The Executive Director may, in writing, approve RPA or RPA system operations at an aerodrome or airport subject to the following conditions:

- (a) imposition of operating restrictions on the approval in the interest of safety;
- (b) publication of details of the approval in the appropriate part of the AIP; and
- (c) revocation or change of the conditions that apply to such approval and publication of details of any revocation or change in conditions in the appropriate part of the AIP.

# SUBPART 6 GENERAL PROVISIONS

#### **Records and documents**

**101.06.1** (1) A Category II or Category III RPA or RPA system operator must establish a system of record-keeping that allows adequate storage, accessibility and enabling the surveillance and traceability of all activities developed in terms of this Part.

(2) Records must be stored in a manner that ensures protection from damage, alteration and theft.

(3) The list of others matters required to be recorded and kept in terms of this Part are set out in Document NAM-CATS-RPA.

# Insurance

**101.06.2** (1) A person may not operate, or cause to be operated or permit any other person to operate a RPA or RPA system unless there is in force adequate liability insurance in respect of third party risks.

(2) A RPA or RPA system owner or operator must make a certified copy of the insurance required in terms of subregulation (1) to be available in case of any inspection carried out by the Executive Director or an authorised officer, inspector or authorised person.

(3) Despite the provision of subregulation (1), the Executive Director may dispense with the requirement depending on the class and category of the RPA or RPA system operation.

## **Insertion of Part 170 in Regulations**

7. The Regulations are amended by the insertion after Part 149 of the following Parts:

# "PART 170 AIR NAVIGATION SERVICES: GENERAL

# LIST OF REGULATIONS

## **SUBPART 1: GENERAL**

- 170.01.1 Definitions for this Part
- 170.01.2 Applicability
- 170.01.3 Safety and regulatory compliance inspections and audits
- 170.01.4 Certification for provision of air navigations services
- 170.01.5 Provision of ANS related service requiring certificate

# SUBPART 2: CERTIFICATION OF AIR NAVIGATION SERVICE PROVIDERS

- 170.02.1 Requirements for certification of air navigation services provider
- 170.02.2 Application for certification
- 170.02.3 Grant of application and issue of certificate
- 170.02.4 Contents of certificate
- 170.02.5 Validity of certificate
- 170.02.6 Amendment of certificate
- 170.02.7 Renewal of certificate
- 170.02.8 Duplicate certificate
- 170.02.9 Display of certificate
- 170.02.10 Transfer of certificate
- 170.02.11 Surrender of certificate
- 170.02.12 Suspension and revocation of certificate
- 170.02.13 Register of certificates
- 170.02.14 Notification of organisational changes
- 170.02.15 Change of name of the holder of certificate
- 170.02.16 Change of address of certificate holder
- 170.02.17 Limitations on certified ANS provider
- 170.02.18 Exemptions based on certificate issued by another State

# SUBPART 3: REQUIREMENTS FOR MANUAL OF PROCEDURES

- 170.03.1 General
- 170.03.2 Contents of manual of procedures
- 174.03.3 Amendment of the manual of procedures

- 170.03.4 Formatting and administration of manual of procedures
- 170.03.5 Distribution and maintenance of manual of procedures
- 170.03.6 Stand-alone documents prepared as attachments to manual of procedures

# SUBPART 4: COMPLIANCE WITH STANDARDS

- 170.04.1 Safety inspections and audits of air navigation facilities, equipment and documents
- 170.04.2 Unrestricted access to ANS facilities, equipment and documents by authorised persons
- 170.04.3 Resolution of safety concerns
- 170.04.4 Imposition of restrictions, prohibitions or conditions
- 170.04.5 Establishment of facilities and equipment
- 170.04.6 Approval of facilities and equipment
- 170.04.7 Air navigation services contingency plans
- 170.04.8 Safety management system
- 170.04.9 Quality management system
- 170.04.10 Changes in quality management system
- 170.04.11 Internal safety inspection and audit programme
- 170.04.12 Security programme
- 170.04.13 Failure to comply with air navigation services requirements

# SUBPART 5: GENERAL REQUIREMENTS FOR PROVISION OF AIR NAVIGATION SERVICES

- 170.05.1 ANS provider organisation
- 170.05.2 Personnel requirements: senior accountable manager and key personnel
- 170.05.3 Accommodation of air navigation services facilities
- 170.05.4 Training and checking programme
- 170.05.5 Documents and records
- 170.05.6 Use and retention of documents and records
- 170.05.7 Control of documents and records
- 170.05.8 Reports of violations
- 170.05.9 Failure to comply with directive
- 170.05.10 Exemptions from air navigation services requirements
- 170.05.11 Discontinuation or disruption of air navigation service

# SUBPART 6: TRANSITIONAL PROVISIONS

170.06.1 Transitional provisions

## SUBPART 1 GENERAL

# **Definitions for this Part**

170.01.1 For the purpose of this Part -

"air navigation services (ANS) Parts" means Parts 171, 172, 173, 174, 175 and 179;

"air navigation services provider" (ANSP) includes the Air Navigation Services established by section 49 of the Act, and any other person, or entity established for the purpose of providing any of the following air navigation services;

(a) an aeronautical telecommunications (ATEL) service in accordance with Part 171;

- (b) an air traffic service (ATS) in accordance with Part 172;
- (c) a flight procedure design (FPD) service in accordance with Part 173;
- (d) an aviation meteorological (A-MET) service in accordance with Part 174;
- (e) an aeronautical information service (AIS) in accordance with Part 175; and
- (f) a search and rescue (SAR) service in accordance with Part 179;

"certificate" includes any approval, certificate, designation or any other form of written authorisation issued by the Executive Director, under Part 171, 172, 173, 174, 175 or 179, to any person or entity authorising that person or entity to provide an air navigation service.

#### Applicability

**170.01.2** (1) This Part -

- (a) prescribes the regulations and procedures governing the certification or approval of a person providing an air navigation service (ANS) within Namibia;
- (b) applies to a person who wants to provide, or is providing, one or more of the following services:
  - (i) an aeronautical telecommunications (ATEL) service in accordance with Part 171;
  - (ii) an air traffic service (ATS) in accordance with Part 172;
  - (iii) a flight procedure design (FPD) service in accordance with Part 173;
  - (iv) an aviation meteorological (A-MET) service in accordance with Part 174;
  - (v) provision of aeronautical charts service in accordance with Part 174;
  - (vi) an aeronautical information service (AIS) in accordance with Part 175; and
  - (vii) a search and rescue (SAR) service in accordance with Part 179;
- (c) applies to the provision of air navigation services -
  - (i) in Namibia; and
  - (ii) in the airspace over the high seas or airspaces of undetermined sovereignty administered by Namibia; and
- (d) sets out certain administrative rules applying to the Executive Director in the administration of this Part.
- (2) This Part does not apply to -
- (a) a person who is providing air navigation services to military aircraft within designated military airspaces in the course of his or her or its duties, for the Namibian Defence Force; or

(b) any air navigation services provided to military aircraft within designated military airspaces by the Namibian Defence Force.

#### Safety and regulatory compliance inspections and audits

**170.01.3** (1) An ANS provider must permit an authorised officer, inspector or authorised person to carry out such safety and regulatory compliance inspections and audits, which may be necessary to verify the validity of any application made in terms of the relevant part of the ANS Parts.

(2) An ANS provider must permit an authorised officer, inspector or authorised person to carry out such safety and regulatory compliance 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 the relevant part of the ANS Parts.

#### Certification for provision of air navigations services

**170.01.4** (1) A person may not provide an air navigation service unless that person has been certificated by the Executive Director in terms of the relevant part of the ANS Parts.

(2) The issuance of certificate to provide an air navigation service is subject to compliance with the relevant requirements set out under these regulations, associated technical standards, aviation directives and any other conditions as may be specified or notified by the Executive Director.

(3) The requirements for the issuance, renewal, amendment, suspension, imposition of condition on, or revocation of a certificate must be in compliance with the provisions of Parts 5 and 10 of the Act and these regulations.

#### Provision of ANS related service requiring certificate

**170.01.5** A person may not provide any ANS related service, where a certificate is required for the provision of that service, unless such certificate has been issued by the Executive Director in accordance with procedures, processes or conditions determined by the Executive Director.

# SUBPART 2 CERTIFICATION OF AIR NAVIGATION SERVICE PROVIDERS

#### Requirements for certification of air navigation services provider

**170.02.1** (1) A person may not provide air navigation service under any of the ANS Parts unless -

- (a) that person holds a certificate issued under any relevant part of the ANS Parts; and
- (b) the service is provided in accordance with -
  - (i) the requirements prescribed under this Part and the relevant part of the ANS Parts; and
  - (ii) the procedures specified in the air navigation service provider's manual of procedures required under Subpart 3.

(2) Except as provided for in Subpart 6, a person may not provide an air navigation service in those portions of airspace and the aerodromes designated by the Executive Director in

terms of Part 71, except under the authority of, and in accordance with the provisions of a certificate issued under the relevant part of the ANS Parts.

# **Application for certification**

170.02.2 An application for the issuing of a certificate to provide an air navigation service, must be -

- (a) made to the Executive Director on the appropriate form set out in the relevant part of the ANS Parts; and
- (b) accompanied by such documents, information and other matters required under the relevant part of the ANS Parts.

# Grant of application and issue of certificate

**170.02.3** (1) Upon receipt of an application for the certification of an ANSP, the Executive Director must consider all relevant representations, information and other documents as required under the relevant part of the ANS Parts prior to the grant of the application and issuing of the certificate.

(2) The Executive Director must grant the application and issue a certificate in the appropriate form set out in the relevant part of the ANS Parts, if the Executive Director is satisfied that -

- (a) the applicant, and the applicant's senior accountable manager and key personnel, are fit and proper persons;
- (b) the granting of the application and issuing of the certificate is not contrary to the interests of aviation safety;
- (c) the personnel of the applicant are adequate in number and have the necessary competencies to provide the service;
- (d) the manual of procedures prepared and submitted with the application contains all the relevant information;
- (e) the facilities, services and equipment are established in accordance with the requirements prescribed in the relevant part of the ANS Parts;
- (f) the operating procedures make satisfactory provision for the safety of aircraft;
- (g) a safety management system under Part 140 acceptable to the Executive Director is in place;
- (h) a quality management system acceptable to the Executive Director is in place;
- (i) the applicant has approved procedures to meet the requirements of the applicable aviation security requirements;
- (j) the applicant has sufficient resources to provide the service; and
- (k) the applicant has applicable liability insurance for the service to be provided.

(3) The granting of an application to provide an air navigation service is subject to compliance with the relevant requirements and standards prescribed in the relevant part of the ANS

Parts, and any other conditions as may be specified or notified by the Executive Director in an aviation directive issued under section 38(6) of the Act.

(4) The Executive Director may, when granting an application, include any conditions as may be considered necessary for the nature and type of air navigation service to be provided and which conditions are in the interest of aviation safety.

(5) The Executive Director may decline to grant an application, and where the Executive Director so declines, the Executive Director must notify the applicant in writing, indicating the reasons for the decline, not more than 14 days after making that decision.

(6) The Executive Director must, in the interests of aviation safety, ensure that only one certificate for the same air navigation service is issued to an ANS provider at any time.

## **Contents of certificate**

**170.02.4** The Executive Director must issue a certificate in the form set out in the relevant part of the ANS Parts, and the certificate must at least include the following information:

- (a) the holder's name, and the physical and mailing address of its principal place of business;
- (b) the type of service to be provided, and for an air traffic service, the service to be provided within a particular airspace or controlled aerodrome designated to the provider by the Executive Director;
- (c) the location of service to be provided;
- (d) conditions of certification, as applicable; and
- (e) effective and expiry dates of the certificate.

#### Validity of certificate

**170.02.5** (1) An ANS provider certificate is valid for a period of two years from the date of issuance or renewal.

(2) The certificate remains in force until it expires, or is surrendered, suspended or revoked in accordance with section 42 or 43 of the Act, as the case maybe, and regulation 170.02.12.

(3) The holder of an ANS provider certificate which has expired must forthwith surrender the certificate to the Executive Director, unless the service provider has applied for renewal of the certificate pursuant to regulation 170.02.7.

#### Amendment of certificate

**170.02.6** (1) The Executive Director may amend a certificate issued under this Part upon -

- (a) application made by the holder of the certificate in the appropriate form set out in the relevant part of the ANS Parts; or
- (b) the Executive Director's initiative, where the Executive Director considers it necessary.

(2) A holder of a certificate applying to the Executive Director for amendment of the certificate under subregulation (1)(a) must -

- (a) attach the completed application form and the proposed amendment to the certificate; and
- (b) pay such fee as may be prescribed under Part 187.

(3) Where the Executive Director initiates amendments under subregulation (1)(b), the holder of the certificate must make amendments as necessary, in its manual of procedures.

- (4) The Executive Director may in accordance with section 45 of the Act -
- (a) amend the certificate in the manner applied for; or
- (b) decline the application to amend the certificate applied for.

(5) Where an application for amendment is declined under subregulation (4)(b), the Executive Director must within 14 days of making such decision, inform the applicant in writing, giving reasons for the refusal.

(6) The Executive Director may, pursuant to section 45(2)(c) of the Act, amend an ANS provider certificate to correct any clerical error or obvious mistake on the face of the certificate and where the Executive Director requires the holder of the certificate to produce the certificate for such purpose, the holder must forthwith produce the certificate.

#### **Renewal of certificate**

**170.02.7** (1) The holder of an ANS provider certificate, if it wishes to continue to provide the service, must at least 90 days immediately preceding the date on which such certificate expires, apply to the Executive Director for the renewal of the certificate.

- (2) An application for the renewal of an ANS provider certificate must be -
- (a) made to the Executive Director in the appropriate form set out in the relevant part of the ANS Parts; and
- (b) accompanied by -
  - (i) copy of the previous ANS provider certificate; and
  - (ii) the appropriate fee as prescribed in Part 187.

(3) The renewal of a certificate is subject to compliance with this Part, and the relevant requirements and standards prescribed under the relevant part of the ANS Parts.

#### Duplicate certificate

**170.02.8** (1) If an ANS provider certificate is lost, stolen, damaged or destroyed, the holder thereof, may apply to the Executive Director for the issue of a duplicate certificate.

- (2) An application referred to in subregulation (1) must be -
- (a) made in the appropriate form set out in the relevant part of the ANS Parts; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(3) A duplicate of the certificate is issued on the appropriate form set out in the relevant part of the ANS Parts.

## **Display of certificate**

**170.02.9** (1) A holder of an ANS provider certificate must display the certificate, or a copy of it, in a conspicuous place, generally accessible to the public at such holder's principal place of business.

(2) Where a copy of the certificate is displayed under subregulation (1), the holder of the certificate must produce the original certificate, if so requested by an authorised officer, inspector or authorised person.

## **Transfer of certificate**

**170.02.10** Unless otherwise provided for the in the relevant part of the ANS Parts, a certificate issued under this Part is not transferable.

## Surrender of certificate

**170.02.11** (1) Subject to subregulation (2) and any conditions as may be specified by the Executive Director when granting the application under the relevant part of the ANS Parts, a holder of an ANS provider certificate may surrender the certificate to the Executive Director at any time.

(2) A holder of an ANS provider certificate who wishes to surrender the certificate must give the Executive Director not less than 180 days' notice in writing, before the date on which the certificate is to be surrendered.

(3) Upon expiry of the period in subregulation (2), the ANS provider may not provide an air navigation service, unless specifically authorised to do so in writing by the Executive Director.

#### Suspension and revocation of certificate

**170.02.12** (1) The Executive Director may under sections 42 and 43 of the Act, suspend or revoke an ANS provider certificate, or impose conditions in respect of any such document, if the Executive Director considers such action necessary for the provision of the air navigation service concerned or in the interests of aviation safety.

(2) Without limitation to the general powers of the Executive Director under the Act to suspend, revoke or impose conditions upon an aviation document the Executive Director may -

- (a) suspend, pending further investigation, an ANS provider certificate, if the Executive Director considers that -
  - (i) a relevant provision of the Act, these regulations or any regulations made under the Act, or a condition in the certificate, has not been or is not being complied with;
  - (ii) the privileges or duties for which the document has been granted are being utilised or carried out in a careless or incompetent manner;
  - (iii) false or materially incorrect information was given to the Executive Director in the application for the certification; or
  - (iv) it is in the public interest to do so; or

(b) revoke a certificate or impose permanent conditions on the certificate, if after an inspection, monitoring or investigation carried out in accordance with this Part, read with Part 13, the Executive Director considers it necessary in the interests of aviation safety.

(3) A person, whose certificate is made subject to permanent conditions must immediately produce the certificate to the Executive Director for the appropriate endorsement to be made.

(4) A holder or any person having the possession or custody of any certificate which has been suspended or revoked in accordance with this Part, must surrender the certificate to the Executive Director within seven days from the date of suspension or revocation.

(5) If an audit directed by the Executive Director finds non-compliance with regulatory requirements or safety standards, the Executive Director must formally notify the ANS provider of the areas or items of non-compliance, through a written notice, specifying a time frame within which the matter of non-compliance is to be rectified.

(6) If following the written notification, and the end of the time of the rectification period specified under subregulation (5), the non-compliances are not addressed, the failure by the holder of the certificate to comply with the relevant regulatory requirements or standards may be taken into account in determining the need for suspension or revocation of the certificate.

(7) For a certificate to be renewed after suspension or revocation, the ANS provider must satisfy the Executive Director, through an audit process, that it has rectified the matters of non-compliance.

(8) The Executive Director may, when considered necessary and in the public interest, designate an alternative service provider for a specified period to provide an air navigation service in respect of a certificate that has been suspended or revoked for the duration of the suspension or revocation in accordance with this Part.

(9) A person in respect of whom a decision is taken under this regulation may seek review of the decision in accordance with Part 13.

# **Register of certificates**

**170.02.13** (1) The Executive Director must keep and maintain or cause to be kept and maintained, a register of all ANS provider certificates referred to in regulation 71.10.1.

- (2) The register must contain the following particulars:
- (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 or types of air navigation service in respect of which the certificate was issued;
- (f) the date on which the certificate was surrendered, amended, varied, suspended or revoked, if applicable;
- (g) the date on which the certificate expires; and

(h) any other particulars as may be considered necessary by the Executive Director.

(3) The particulars of the certificate referred to in subregulation (2), or any changes to the particulars, must be recorded in the register in the manner set out in the registry manual.

(4) The register must be kept in a safe place at the Civil Aviation Registry established under section 52 of the Act, and be accessible to the public in the manner as set out in regulation 3.04.6.

(5) The Executive Director must furnish a copy of the register to any person who requests the copy upon payment of the appropriate fee as prescribed in Part 187.

## Notification of organisational changes

170.02.14 A holder of an ANS provider certificate must notify the Executive Director -

- (a) in writing; or
- (b) in the manner set out in Subpart 3 of Part 140,

of a change of circumstances that materially affect its capacity to provide any of its air navigation service within 14 days after the change occurs.

## Change of name of holder of certificate

**170.02.15** (1) A holder of an ANS provider certificate must, in the manner determined by the Executive Director, apply to the Executive Director for -

- (a) change of name on the certificate; or
- (b) an endorsement of the change of name on the certificate.

(2) When applying under subregulation (1), the holder of the certificate must submit to the Executive Director -

- (a) the original certificate or a copy thereof;
- (b) a court order or other legal document verifying the name change; and
- (c) a fee as prescribed under Part 187.

(3) The Executive Director must, where satisfied that the change may be made, re-issue or endorse the certificate with the appropriate changes applied for and provide the amended certificate to the holder of the certificate and retain a copy of the certificate.

#### Change of address of certificate holder

**170.02.16** (1) A holder of an ANS provider certificate must notify the Executive Director of a change in the physical or mailing address of the certificate holder within 14 days of such change.

(2) A person who does not notify the Executive Director of the change in the physical or mailing address of the certificate holder within the time frame specified in subregulation (1) must not exercise the privileges of the certificate as from the date of expiry of the 14 days.

# Limitations on certified ANS provider

170.02.17 (1) An ANS provider must only provide services for which it is certified.

(2) An ANS provider may not provide a service for which it is certified, unless such holder has available sufficient resources, including facilities, equipment, tooling, technical data and qualified personnel necessary to maintain the equipment in accordance with its manual of procedures and the requirements prescribed in this Part and under the ANS Parts, as applicable.

#### Exemption based on certificate issued by another State

**170.02.18** (1) Where an applicant for certification holds a certificate as an ANS provider issued by the appropriate authority of another State acceptable to the Executive Director, and there is a reciprocal arrangement for the mutual recognition of certificates issued by the authorities of Namibia and the other State, the Executive Director may, exempt the applicant from certain requirements of this Part or the relevant part of the ANS Parts as the Executive Director may determine.

(2) In making a decision regarding exemptions referred to in subregulation (1), the Executive Director may -

- (a) require the applicant to provide evidence of equivalent compliance with the requirements of this Part or the relevant part of the ANS Parts; and
- (b) contact the appropriate authority of the State that issued the certificate to validate equivalent compliance.

#### SUBPART 3 REQUIREMENTS FOR MANUAL OF PROCEDURES

#### General

**170.03.1** (1) An ANS provider must, at all times, maintain a manual of procedures for each service that it provides and that complies with the requirements prescribed in the relevant part of the ANS Parts.

- (2) The manual of procedures must be -
- (a) type written and in a format that is easy to revise;
- (b) include a list of effective pages;
- (c) organised in a manner that facilitates the evaluation and certification process taking into account the contents as prescribed in regulation 170.03.2; and
- (d) signed by the ANS provider.
- (3) An ANS provider must -
- (a) submit the manual of procedures to the Executive Director for approval; and
- (b) keep at least one approved copy of the manual at its principal place of business.

## Contents of manual of procedures

**170.03.2** (1) The manual of procedures must contain all information and instructions necessary to enable the personnel of the ANS provider to perform their duties.

(2) Each manual of procedures prepared under this Part must include the following particulars as appropriate to the service provided:

- (a) service to be provided, including the location of each facility and airspace covered;
- (b) the hours of service for each service provided;
- (c) the service provider's organisation structure, including the reporting lines, functions, duties and responsibilities of operational positions;
- (d) personnel requirements and their responsibilities;
- (e) the methodology for determining the number of staff;
- (f) training and performance assessment of staff and how that information is tracked;
- (g) the safety management system;
- (h) the quality management system;
- (i) contingency plans developed for part or total system failure or disruption of services;
- (j) compliance with the applicable civil aviation security requirements;
- (k) facilities and equipment and how they are maintained;
- (l) maintenance and control of documents and records;
- (m) search and rescue responsibilities and co-ordination, operations, plan and procedures, as applicable;
- (n) systems, processes and procedures in the provision of each air navigation service including, procedures for fault and defect reporting;
- (o) procedures to be followed for revising the manual of procedures; and
- (p) any other information as may be considered necessary by the ANS provider or as may be required by the Executive Director.

## Amendment of manual of procedures

**170.03.3** (1) For the purpose of maintaining the accuracy of the information in the manual of procedures, the -

- (a) ANS provider must whenever necessary, amend the manual of procedures; and
- (b) Executive Director may direct an ANS provider, in writing, within a reasonable period specified in the direction, to amend its manual of procedures in a way specified in the direction.

(2) Despite subregulation (1), the holder of a certificate must submit the proposed amendment to the Executive Director for approval, before the manual is amended.

- (3) An ANS provider must -
- (a) ensure that its manual of procedures is amended, as required, so that it continues to provide a current description of the ANS provider's organisation, service and facilities;
- (b) ensure that any amendments made to its manual of procedures meet the applicable requirements of this Subpart;
- (c) comply with the applicable manual of procedures amendment procedures;
- (d) provide the Executive Director with a copy of each amendment to its manual of procedures, immediately after the amendment is incorporated into the manual of procedures; and
- (e) comply with any direction which the Executive Director may consider necessary in the interests of aviation safety.

(4) Replacement pages must be annotated with a vertical line in the outer margin to indicate the portion, which has been revised as follows:

- (a) a vertical line beside text or diagram indicates that the item has been amended;
- (b) the specific editorial or typographical changes will not otherwise be marked;
- (c) a vertical line beside a blank space in between text indicates that a previous item has been removed; and
- (d) the date of amendment will appear at the foot of the page.

(5) Urgent changes or temporary instructions must be notified by the issue of supplementary procedures, which must be regarded as forming a part of the main text until either incorporated therein by a routine amendment or cancelled.

(6) An ANS provider may not make changes to the procedures contained in the manual of procedures except by an amendment or supplementary procedure.

#### Formatting and administration of manual of procedures

**170.03.4** (1) Each page of the manual of procedures must indicate the date of the original document or the date of any subsequent amendment and in addition, each page must indicate the following elements:

- (a) the title of the manual of procedures;
- (b) the issuing authority; and
- (c) the page number.

(2) The ANS provider must review its manual of procedures at regular intervals as specified in the manual of procedures.

# Distribution and maintenance of manual of procedures

**170.03.5** (1) An ANS provider must make available copies of the manual of procedures to the units providing the services.

(2) The person in charge of an ANS unit is responsible for ensuring incorporation of any amendments or supplementary procedures to the manual of procedures which may be issued from time to time.

#### Stand-alone documents prepared as attachments to manual of procedures

**170.03.6** (1) The procedures, systems and processes required under regulation 170.03.2(2)(n) may be published as stand-alone documents, and such documents are by reference in the manual of procedures, to be considered as attachments to the manual of procedures with the appropriate cross-referencing.

(2) The procedures, systems and processes in accordance with subregulation (1) must include the procedures, systems and processes applicable to the service provided or to be provided under the relevant part of the ANS Parts.

(3) An ANS provider must publish station standing instructions (SSIs), which are applicable to individual units and which contain procedures applicable only at that unit and such SSIs are, in accordance with subregulation (1), to be considered as attachments to the manual of procedures.

### SUBPART 4 COMPLIANCE WITH STANDARDS

#### Safety inspections and audits of air navigation facilities, equipment and documents

**170.04.1** The Executive Director, or an authorised officer, inspector or authorised person, may carry out safety inspections and audits of air navigation facilities, services, documents and records of the air navigation service provider which may be necessary to determine compliance with a certificate, and the requirements and standards specified under the relevant part of the ANS Parts.

#### Unrestricted access to ANS facilities, equipment and documents

**170.04.2** An ANS provider must, pursuant to section 48 of the Act, provide the Executive Director, or an authorised officer, inspector or authorised person unrestricted access to the facilities, installations, records and documents of the ANS provider to determine compliance with the requirements of this Part and any requirements made under the relevant part of the ANS Parts.

#### **Resolution of safety concerns**

**170.04.3** (1) The holder of an ANS provider certificate must, following a regulatory inspection or audit -

- (a) submit to the Executive Director for evaluation and acceptance, corrective action plans with timeframes to address non-conformities identified during the inspections and audits; and
- (b) ensure that the corrective actions are implemented within the time periods specified in the corrective action plans.

(2) The holder of an ANS provider certificate may, when circumstances demand, amend the timeframes specified in the corrective action plan and submit the amended corrective action plan to the Executive Director for evaluation and acceptance.

(3) An an authorised officer, inspector or authorised person must carry out follow-up inspections or audits to verify that the ANS provider is implementing the corrective action plans submitted to the Executive Director to ensure that non-conformities are being addressed and closed.

(4) The holder of an ANS provider certificate must, when requested by an authorised officer, inspector or authorised person for the purpose of determining compliance with the regulations and resolution of safety concerns, produce within three days of such request, any relevant documents under the holder's possession.

## Imposition of restrictions, prohibitions or conditions

**170.04.4** (1) The Executive Director may, by way of an aviation directive issued under section 38(6) of the Act, impose restrictions, prohibitions or conditions on any certificate, where recommended by an authorised officer, inspector or authorised person, if the results of an inspection or an audit has shown non-conformances with the certification requirements or in the event of any unresolved safety concerns.

(2) The Executive Director may in accordance with subregulation (1), impose restrictions, prohibitions or conditions on -

- (a) the type or coverage of the air navigation service to be provided;
- (b) the method used for delivery of the service; or
- (c) the periods during which a service is to be provided.

(3) Where a holder of an ANS provider certificate fails to address non-conformities within the time period specified in the corrective action plan, the Executive Director may carry out enforcement action in accordance with Part 13.

# Establishment of facilities and equipment

**170.04.5** (1) An ANS provider must establish facilities and equipment that are appropriate to the air navigation service which it provides as listed in its manual of procedures.

(2) The facilities and equipment required by subregulation (1) must be acceptable to the Executive Director.

- (3) Despite subregulation (1), an ANS provider must -
- (a) provide in the designated portion of airspace and at aerodromes, facilities for the provision of the air navigation service; and
- (b) adopt and put into operation the appropriate standard systems and operational practices and rules required for the provision of the service under Part 71 and the relevant part of the ANS Parts.

# Approval of facilities and equipment

170.04.6 A person may not install, maintain, contract or operate an air navigation service facility in the airspaces designated under Part 71, and at aerodromes, unless the person has

obtained the prior approval of the Executive Director to do so in terms of relevant part of the ANS Parts.

## Air navigation services contingency plans

**170.04.7** (1) An ANS provider must develop and maintain a contingency plan required under regulation 170.03.2(2)(i) for implementation in the event of disruption or potential disruption of air navigation services in the airspace for which the holder of the certificate is responsible.

(2) An ANS provider must liaise with other air navigation service providers in adjacent or contiguous airspaces while developing contingency plans.

- (3) The contingency plan must include -
- (a) the actions to be taken by the service provider's personnel responsible for providing the service;
- (b) where applicable, alternative arrangements for providing the service; and
- (c) the arrangements for resuming normal operations for the service.

(4) Despite subregulation (3), the contingency plan must be prepared in accordance with standards prescribed in the relevant part of the ANS Parts.

#### Safety management system

**170.04.8** (1) An ANS provider must, in accordance with Part 140, establish a safety management system to ensure a systematic approach to managing safety, including policies, procedures, and practices necessary to safely provide the air navigation service covered by its certificate.

(2) The safety management system must be implemented in accordance with the applicable standards prescribed in the relevant part of the ANS Parts.

#### Quality management system

**170.04.9** (1) An ANS provider must establish a quality management system that is acceptable to the Executive Director and which -

- (a) focuses on the consistent delivery of each air navigation service it provides;
- (b) complies with approved quality performance standards;
- (c) includes a quality assurance system for the control, supervision and the management of the air navigation service that it provides; and
- (d) complies with standards prescribed under the relevant part of the ANS Parts.

(2) The quality management system established in accordance with subregulation (1) may be integrated with the safety management system required in 170.04.8.

#### Changes in quality management system

**170.04.10** (1) Where an ANS provider desires to make any change in the quality management system required by regulation 170.04.9, and which is significant to the showing of

compliance with the appropriate requirements prescribed in the relevant part of the ANS Parts, the ANS provider must apply to the Executive Director for the approval of such change.

(2) The Executive Director may grant an application for the approval of a change in the quality assurance system, if the ANS provider satisfies the Executive Director, upon submission of appropriate proposed changes to its manual of procedures that it will, after the implementation of such approved change, continue to meet an acceptable level of compliance with the provisions of this Part, and the applicable standards prescribed in Part 71 and the relevant part of the ANS Parts.

#### Internal safety inspection and audit programme

**170.04.11** (1) An ANS provider must have in place, a programme for monitoring the performance of the service it provides to verify that the service provided complies with the regulatory standards and meets the air navigation services objectives.

- (2) The programme required under subregulation (1) must include -
- (a) internal safety inspections and audits of each air navigation service facility listed in its manual of procedures; and
- (b) testing and calibration, as applicable, of each equipment listed in its manual of procedures.
- (3) An ANS provider -
- (a) must review its procedures and processes related to each air navigation service operation through an internal audit process using specified procedures;
- (b) may conduct internal audits of its organisation through an entity that is external to the service provider to ensure the independence and objectivity of the audit results;
- (c) must develop and use checklists, questionnaires and where appropriate, confidential interviews in conducting internal audit of its service.

(4) In conducting internal safety audits and inspection of its service, an ANS provider must focus on any matters, including but not limited to, management functions, staffing, compliance with regulations and standards, levels of competency and training.

#### Security programme

170.04.12 An ANS provider must -

- (a) have, and put into effect, a security programme that is acceptable to the Executive Director and that sets out the procedures designed to protect its personnel, and any facility and equipment that it uses, in providing any of its air navigation services; and
- (b) if required to do so under section 126 of the Act, have in place an aviation security programme which complies with the requirements of Part 111.

#### SUBPART 5 NOLIDEMENTS FOR PROVISION OF ALL NAVICATION SE

# GENERAL REQUIREMENTS FOR PROVISION OF AIR NAVIGATION SERVICES

## ANS provider organisation

**170.05.1** An ANS provider must, at all times, maintain an appropriate organisation with a sound and effective management structure to enable it to provide the air navigation service covered by its certificate and in accordance with requirements prescribed in this Part and the relevant part of the ANS Parts.

#### Personnel requirements: senior accountable manager and key personnel

**170.05.2** (1) The senior accountable manager for the ANS provider, and the suitable key personnel, where relevant, designated in the manner prescribed in Subpart 3 of Part 140, must exercise the privileges under the certificate for the proper functioning and operation of the air navigation service it provides.

(2) The senior accountable manager for the ANS provider's organisation must ensure that every air navigation service listed in its manual of procedures -

- (a) can be sufficiently resourced; and
- (b) is provided in accordance with the requirements and standards prescribed in this Part and in the relevant part of the ANS Parts.

(3) The senior accountable manager must ensure that all activities listed in the manual of procedures of the ANS provider are carried out in accordance with the requirements of this Part, Part 71 and the relevant part of the ANS Parts.

- (4) The senior accountable manager must -
- (a) ensure that all the air navigation service activities can be sufficiently resourced and carried out to meet applicable operational requirements;
- (b) have unrestricted access to work performed or activities undertaken by all other persons as employees of, and other persons rendering service under contract with, the ANS provider, and full rights of consultation with any of those persons in respect of compliance by each one of them;
- (c) order cessation of any activity which the senior accountable manager considers to be unsafe to the operation or delivery of the air navigation service;
- (d) establish liaison mechanisms with the Executive Director with a view to ascertain compliance with requirements, and interpretations of such requirements, and to facilitate liaison between the Executive Director and the ANS units under the control of the ANS provider; and
- (e) report directly to the Executive Director on matters affecting operation and delivery of the air navigation service.

(5) The senior accountable manager must identify the following key personnel to assist him or her to ensure compliance with the specified requirements:

(a) a safety manager who is responsible for safety across all of the air navigation service, and who has direct access to the accountable manager on matters affecting safety of the air navigation service; and (b) a quality control officer who is responsible for quality control across all the air navigation service, and who has direct access to the accountable manager on matters affecting quality of the air navigation service,

but, taking into account the size and complexity of an organisation, the safety officer and quality officer functions may be combined.

(6) An ANS provider must, in accordance with regulation 140.03.2, designate key personnel to enable it to provide the service in accordance with its manual of procedures.

- (7) An ANS provider must -
- (a) ensure the competence of those personnel who are authorised by the service provider to provide the air navigation service, and training and assessment for each service, listed in the service provider's manual of procedures;
- (b) define arrangements and processes to be followed to ensure an adequate number of suitably trained and qualified staff are available in respect of each air navigation service it provides;
- (c) establish arrangements that define the management responsibilities and processes for ensuring adequate supervision of staff;
- (d) establish procedures for assessing and maintaining the competence of personnel who are authorised to provide or supervise the air navigation service under this Part, including a mechanism for ensuring that only trained and competent staff undertake the provision of each air navigation service it provides;
- (e) maintain a record of all authorised personnel, which record must include particulars of the scope of their authorisations;
- (f) describe and provide its authorised staff with, the scope of their authorisation; and
- (g) maintain the records required in paragraph (e) for a minimum period of five years from the date on which the personnel ceases to be an employee of the organisation.

(8) An ANS provider must provide all authorised personnel with written evidence of the scope of their authorisation including duties and responsibilities.

#### Accommodation of air navigation services facilities

170.05.3 An ANS provider must satisfy the Executive Director that -

- (a) it has sufficient resources for each service to be performed under its certificate;
- (b) the working environment is appropriate for each task carried out and, in particular, complies with requirements covered under its certificate;
- (c) appropriate office accommodation is provided for the administration of the services performed, including the administration of the organisation's safety, operational and planning functions and for maintenance of technical records; and
- (d) appropriate storage facilities are provided for, equipment, tools and materials required by the organisation.

# Training and checking programme

**170.05.4** (1) Each ANS provider must, in accordance with the requirements set out in the relevant part of the ANS Parts, implement a training and checking programme to ensure that an individual performing a function in connection with any air navigation service is competent and holds the appropriate qualification to perform the duties which he or she is assigned.

(2) An individual is considered to be competent as required by subregulation (1), if that individual is -

- (a) licensed where the function can only be performed by the holder of a licence;
- (b) certified where the function can only be performed by the holder of a certificate;
- (c) rated and validated, where the function can only be performed by the holder of an appropriate rating and validation;
- (d) endorsed, where the function can only be performed by the holder of an appropriate endorsement;
- (e) qualified, where the function can only be performed by the holder of an appropriate qualification;
- (f) appropriately trained and assessed to be proficient in the performance of their functions;
- (g) up-to-date with the current knowledge, skills and information that is or are necessary for the performance of his or her functions; and
- (h) has knowledge and skills in emerging matters identified as essential to task performance.

(3) An ANS provider must develop a comprehensive training and checking programme to be approved by the Executive Director, that includes, initial, on-job-training, currency and recurrency, specialised and management training to ensure that each member of the technical personnel maintain the appropriate level of qualification.

- (4) An ANS provider must -
- (a) carry out training needs assessment to determine individual training needs;
- (b) develop periodic training plans for each technical personnel providing an air navigation service at each ANS unit based on the training programme; and
- (c) maintain training records for each technical personnel providing an air navigation service at each ANS unit, including records of trainings attended and the dates of training.
- (5) In developing training programmes and plans, an ANS provider must consider -
- (a) the human factors and human performance requirements for the provision of each air navigation service;
- (b) skills, knowledge and attitudes requirements for each air navigation position; and

(c) competency requirements for each air navigation position.

#### Documents and records

170.05.5 (1) An ANS provider must -

- (a) establish a system for records which covers identification, collection, indexing, storage, security, maintenance, access and disposal of records necessary for the provision of the air navigation services it provides;
- (b) ensure availability of documents and records, including facility manuals, technical standards, manual of procedures, charts and any other documentation, to the ANS units personnel as necessary for the provision of the air navigation service listed in its certificate; and
- (c) ensure availability of documents and records relating to inspections and audits, including records of identified deficiencies and actions taken to resolve such deficiencies.

(2) The records system required by subregulation (1)(a) must provide an accurate chronicle of activities for the purpose of reconstruction of events for investigation, and for safety system analysis.

(3) An ANS provider must, at the request of the Executive Director or of an authorised officer, inspector or authorised person, make the documents and records, or copies, or extracts from them, available for inspection.

#### Use and retention of documents and records

170.05.6 (1) A person may not -

- (a) use a certificate which has been forged, altered, revoked, or suspended, or to which he or she is not entitled;
- (b) forge or alter any certificate issued or required by or under a relevant part of the ANS Parts;
- (c) lend any certificate or exemption issued or required by or under a relevant part of the ANS Parts to any other person;
- (d) make any false representation for the purpose of procuring for himself or herself or any other person the grant, issue, renewal or variation of any such certificate or exemption; or
- (e) mutilate, alter, render illegible or destroy any records, or any entry made therein, by an ANS provider, or knowingly make, or procure or assist in the making of, any false entry in any such record, or intentionally omit to make a material entry in such record.

(2) All documents and records required to be maintained by or under this Part, Part 71 or any relevant part of the ANS Parts must be -

- (a) kept in a permanent and indelible material;
- (b) stored so that they can be retrieved if needed for an aviation safety investigation; and

(c) retained for five years, unless a different period is otherwise provided for in the relevant part of the ANS Parts.

#### Control of documents and records

170.05.7 (1) An ANS provider must establish and put into effect -

- (a) a system for controlling documents and records which cover the authorisation, standardisation, publication, distribution and amendment of all documentation issued by the organisation, or required by the organisation for the air navigation service it provides; and
- (b) a procedure to identify, collect, index, store, maintain and dispose of the records that are necessary for, or a result of the provision of an air navigation service.
- (2) The document control system established by an ANS provider must ensure that -
- (a) documentation is reviewed and authorisation of documents and records is made by the appropriate authority designated by the ANS provider to the provider's management and safety accountability structures;
- (b) that the currency of documents can be readily determined and that only current versions are available for operational use;
- (c) current issues of relevant documentation are available to personnel at all locations where they need access to such documentation for the provision of the air navigation service;
- (d) operationally obsolete documentation is promptly removed from all points of issue or use;
- (e) changes to documentation are reviewed and approved by appropriate personnel;
- (f) a master copy of relevant documents and records is securely held;
- (g) the current version of each item of documentation can be identified to preclude the use of out-of-date editions; and
- (h) documents and records are archived where they have been superseded.

(3) An ANS provider must ensure that all documents that are related to and referenced in the manual of procedures are indexed in that manual.

#### **Reports of violations**

**170.05.8** (1) Any person who knows of a violation of any regulations or directives issued under this Part, must report it to the Executive Director in the form and manner determined by the Executive Director.

(2) The Executive Director may determine the nature and type of investigation or enforcement action that need to be taken in the event of a reported violation in accordance with the provisions of the Act and Parts 13 and 185.

(3) If the person referred to in subregulation (1) is a participant in the Namibia civil aviation system, and that person refuses, fails or neglects to comply with that subregulation, the Executive Director may invoke the provisions of -

- (a) sections 42 or 43 of the Act regarding suspension or revocation of aviation documents or the imposition of conditions on those documents; or
- (b) Subpart 3 of Part 13 and 185 of these regulations regarding the imposition of administrative fines,

in order to ensure that the person complies with that subregulation.

#### Failure to comply with directive

**170.05.9** (1) The Executive Director may authorise an inspection or investigation, as the case may be, into any allegation of non-compliance with an aviation directive or conditions of a certificate in respect of an ANS provider in accordance with Parts 13 and 185.

(2) A person who fails to comply with an aviation directive or conditions of a certificate in respect of an ANS provider in accordance with Part 13 of the Act commits an offence and is liable to the penalties specified in that Part or to any administrative penalties prescribed in Part 185.

#### Exemptions from air navigation services requirements

**170.05.10** (1) A certified air navigations service provider may apply to be exempted from any particular provision set out in Part 71 or in any part of the ANS Parts in accordance with section 46 of the Act and Part 3.

(2) The Executive Director may in accordance with section 46 of the Act and Part 3, grant an exemption from any of the provisions of this Part, Part 71 or any part of the ANS Parts, taking into account all safety-related aspects of the air navigation service provided.

(3) Where an exemption is granted in accordance with subregulation (2), the Executive Director may determine the conditions necessary to ensure an equivalent level of safety is established, and such conditions must be set out in an endorsement in the ANS provider's manual of operations.

(4) An ANS provider must comply with any conditions specified by the Executive Director under of subregulation (3).

#### Discontinuation or disruption of air navigation service

**170.05.11** (1) A holder of an ANS provider certificate may not temporarily or otherwise, discontinue or disrupt the provision of an air navigation service for which it has been certified, unless it has given the Executive Director at least 180 days' written notice of the discontinuance or disruption.

- (2) Subregulation (1) does not apply if, having regard to the provider's circumstances -
- (a) it was not reasonably possible for the provider to give at least 180 days' notice; and
- (b) the provider gives the notice as soon as reasonably possible.

#### SUBPART 6 TRANSITIONAL PROVISIONS

#### **Transitional provisions**

**170.06.1** (1) Where, before the commencement of this Part, an applicant for a certificate required under this Part was already lawfully providing an air navigation service whether in terms of any repealed law or not, the applicant may be exempted from certain requirements of this Part for a specified period as may be determined by the Executive Director.

(2) The Executive Director may, pursuant to section 67(3) of the Act, in the circumstances mentioned in subregulation (1), issue a transitional certificate in writing to the ANS provider to continue providing the services for a specified period which period may not exceed 18 months until a certificate is issued by the Executive Director.

- (3) A transitional certificate issued under this Subpart expires -
- (a) on the date on which a certificate is issued under Subpart 2;
- (b) on the expiry date specified by the Executive Director in the transitional certificate; or
- (c) upon withdrawal of the transitional certificate in accordance with subregulation (6),

whichever is the earlier.

(4) The requirements of this Part, apply, subject to changes required by the context to a transitional certificate issued by the Executive Director under this Subpart.

(5) The Executive Director may at any time, withdraw any transitional certificate issued under this Subpart upon recommendation by an authorised officer, inspector or authorised person, where a serious non-compliance which compromises safety is identified, and the air navigation service provider must immediately cease operations.

(6) The holder of a transitional certificate which has been withdrawn by the Executive Director in accordance with subregulation (5) may apply for re-issue of the transitional certificate as soon as the identified non-compliances have been resolved.

# PART 171 AIR NAVIGATION SERVICES: AERONAUTICAL TELECOMMUNICATION SERVICES

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#### SUBPART 1 GENERAL

# Definitions and interpretation in this Part

**171.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-ATEL.

(2) For purposes of this Part -

- (a) a telecommunication or radio-navigation or surveillance service is provided using one or more facilities at one or more locations, each facility consisting of -
  - (i) one item of equipment; or
  - (ii) items of interconnected equipment at a particular location;
- (b) a service is interrupted if, during the course of its operation it is -
  - (i) not operating because it has failed or has been suspended; or
  - (ii) operating outside its technical specification.

(3) In this Part, aeronautical telecommunication service refers to an air navigation service related to the provision of any of the following:

- (a) Radio Navigation Aids in accordance with the provisions of Volume I of Annex 10 to the Chicago Convention, as adopted in this Part;
- (b) Communication Procedures including those with Procedures for Air Navigation Services (PANS) Status and Administrative Provisions in accordance with Volume II of Annex 10 to the Chicago Convention, as adopted in this Part;
- (c) Communication Systems including digital data communication systems and voice communication systems in accordance with the provisions of Volume III of Annex 10 to the Chicago Convention, as adopted in this Part;
- (d) Surveillance and Collision Avoidance Systems in accordance with the provisions of Volume IV of Annex 10 to the Chicago Convention, as adopted in this Part;
- (e) Aeronautical Radio Frequency Spectrum Utilisation in accordance with the provisions of Volume V of Annex 10 to the Chicago Convention, as adopted in this Part;
- (f) other facilities supporting Air Traffic Services (ATS) provided under Part 172;
- (g) other facilities supporting Aeronautical Meteorological (A-MET)services provided under Part 174;
- (h) other facilities supporting Aeronautical Information Services (AIS) provided under Part 175; and
- (i) other facilities supporting Search And Rescue (SAR) services provided under Part 179.
- (4) In this Part reference to -

"Air Traffic Electronic Safety Personnel (ATSEP)" must be construed as reference to any qualified and certified ATEL personnel performing the installation, commissioning, operation, maintenance and decommissioning of CNS facilities;

"Communications, Navigation and Surveillance (CNS) services or systems" must be construed as reference to the ATEL services as described in subregulation (2); and

"Radio Regulations" must be construed as reference to -

- (a) the Radio Regulations published by the International Telecommunication Union (ITU), as amended from time to time by the decisions embodied in the Final Acts of World Radio Communication Conferences (WRC), as adopted by the Communications Regulatory Authority of Namibia (referred to as "CRAN" in this Part) established by section 4 of the Communications Act, 2009 (Act No. 8 of 2009);
- (b) information on the ITU processes as they relate to aeronautical radio frequency spectrum contained in the Handbook on Radio Frequency Spectrum Requirements for Civil Aviation (Doc 9718).

# Applicability

- **171.01.2** (1) This Part -
- (a) prescribes the -
  - (i) regulatory requirements and standards for the provision, installation, commissioning, operation, maintenance and decommissioning of aeronautical telecommunications (ATEL) services or systems used for air traffic services, and aeronautical radio-navigation (ANAV) services used for air navigation, conjointly referred to as ATEL services; and
  - (ii) operating and technical standards for ATEL services used for air traffic services, and aeronautical radio-navigation services used for air navigation;
- (b) applies to a person, who wishes to become, or is, an ATEL service provider including a person who wishes to provide flight inspection or calibration services.
- (2) This Part does not apply to -
- (a) a person, including a person who is providing an ATEL service in the course of his or her duties for the Namibian Defence Force; or
- (b) any ATEL service provided by and for the sole use of the Namibian Defence Force.

#### **Standards for provision of ATEL services**

**171.01.3** (1) An ATEL service provider must provide services in full compliance with the -

- (a) requirements prescribed in Part 170;
- (b) requirements prescribed in this Part;
- (c) standards set out in Document NAM-CATS-ATEL;
- (d) requirements of any other Parts referred to in this Part;
- (e) provisions set out or referred to in ICAO Annex 10;
- (f) standards set out or referred to in any relevant ICAO Documents;
- (g) provisions of any other relevant Authority documents; and

(h) ATEL provider's manual of procedures.

# SUBPART 2 CERTIFICATION OF ATEL SERVICE PROVIDERS

#### **Requirement for certification**

**171.02.1** A person may not install, maintain, repair, modify, calibrate or decommission an ATEL facility used for air navigation or for the provision of air traffic services except, under the authority of, and in accordance with the provisions of a certificate issued under this Part, the requirements prescribed in Part 170, and the standards set out in Document NAM-CATS-ATEL.

#### Application for certificate or amendment thereof

171.02.2 An application for the issuing of an ATEL service provider certificate, or an amendment thereof, must be -

- (a) made to the Executive Director in the appropriate set out form set out in Document NAM-CATS-ATEL; and
- (b) accompanied by the -
  - (i) manual of procedures referred to in regulation 171.03.1;
  - (ii) appropriate fee as prescribed in Part 187.

#### Issue of ATEL service provider certificate

**171.02.3** (1) The Executive Director may issue an ATEL service provider certificate, if the Executive Director is satisfied that -

- (a) the applicant meets the requirements prescribed in Part 170 and this Part;
- (b) the applicant's personnel required by this Part are competent to perform their respective duties;
- (c) the applicant's senior personnel have not held a senior position in an organisation whose approval was revoked by the Executive Director; and
- (d) the issuing of the certificate is not contrary to the interests of aviation safety.

(2) The ATEL service provider certificate referred to in subregulation (1) is issued in the appropriate form, and contains the information, set out in Document NAM-CATS-ATEL.

## **Renewal of ATEL service provider certificate**

**171.02.4** (1) An application for the renewal of an ATEL service provider certificate, must be -

- (a) made to the Executive Director on the appropriate form set out in Document NAM-CATS-ATEL; and
- (b) accompanied by the -
  - (i) manual of procedures referred to in 171.03.1; and

(ii) appropriate fee as prescribed in Part 187.

(2) The holder of a certificate must, if it wishes to renew the certificate, at least 90 days immediately preceding the date on which the ATEL service provider certificate expires, apply to the Executive Director for the renewal of such certificate.

# Duplicate certificate

171.02.5(1)An application for a duplicate certificate as contemplated in Part170 must be -

- (a) made in the appropriate form set out in Document NAM-CATS-ATEL; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(2) A duplicate of the certificate is issued on the appropriate form set out in Document NAM-CATS-ATEL.

## Privileges of ATEL service provider certificate holder

**171.02.6** The privileges of an ATEL service provider certificate are limited to the services authorised by the certificate and the appropriate specifications set out in Document NAM-CATS-ATEL.

# SUBPART 3 GENERAL REQUIREMENTS FOR PROVISION OF AERONAUTICAL TELECOMMUNICATION SERVICES

# Manual of procedures

**171.03.1** The holder of an ATEL service provider certificate must at all times, maintain a manual of procedures that -

- (a) complies with the requirements of this Part and of Part 170; and
- (b) contains the information set out in Document NAM-CATS-ATEL.

# ATEL organisation

**171.03.2** An ATEL service provider must, at all times, maintain an appropriate organisation with a sound and effective management structure to enable it to provide, in accordance with requirements prescribed in this Part and the requirements set out in Document NAM-CATS-ATEL, the aeronautical telecommunication (ATEL) services covered by its certificate.

# **Personnel requirements**

**171.03.3** (1) An ATEL service provider must engage, employ or contract sufficient, competent and qualified personnel as required under Part 170, to provide the ATEL services required under this Part.

(2) In relation to the personnel referred to subregulation (1), an ATEL service provider must -

(a) provide them with appropriate trainings; and

(b) certify them as air traffic electronic safety personnel (ATSEP) with written evidence of the scope of their authorisation before they can exercise their duties.

(3) An ATEL service provider must engage or contract, competent and qualified personnel as required under Part 170, to perform the installation, commissioning, operation, maintenance and decommissioning of communications, navigation and surveillance (CNS) facilities.

(4) An ATEL service provider must provide in its manual of procedures, an analysis of the ATSEP required to perform the ATEL services listed in its certificate taking into account the duties and workload required.

- (5) An ATEL service provider must -
- (a) define a method for determining the required number of ATSEP and the procedure for their recruitment and progression; and
- (b) develop and include in its manual of procedures, job descriptions for ATSEP involved in the provision of ATEL services.

#### Training and certification of ATEL personnel

**171.03.4** (1) An ATEL service provider must ensure that a person does not perform a function related to the installation, commissioning, operation, maintenance or decommissioning of any CNS system unless -

- (a) that person has successfully completed training in the performance of that function;
- (b) the ATEL service provider, with supported documentation, is satisfied that the person is competent in performing that function; and
- (c) that person has been certified as an ATSEP with written evidence of the scope of his or her authorisation before the person can exercise his or her duties
- (2) An ATEL service provider must -
- (a) develop an overall training policy, programme and plan for the ATSEP in accordance with regulation 170.05.4; and
- (b) maintain individual training records for each of its ATSEP in accordance with regulation 170.05.4.

(3) An ATEL service provider must develop a training programme with initial qualification and continuation training for certification of the ATSEP personnel to ensure that all those engaged in the installation, commissioning, operation, maintenance, inspection or decommissioning of CNS facilities are appropriately authorised or certified.

#### ATEL facilities, equipment, tools, material and procedures

**171.03.5** Before issuing a certificate to an ATEL service provider, the Executive Director must satisfy himself or herself that the service provider's facilities, equipment, tools, material and procedures meet the requirements of this Part and Subpart 5 of Part 170.

#### **Services records**

**171.03.6** (1) An ATEL service provider must keep adequate records of all services performed on its facilities and equipment.

- (2) The records referred to in subregulation (1) must -
- (a) indicate the name of each person who performed the work;
- (b) indicate the name of each person who inspected the work; and
- (c) be retained for five years from the date on which the facility to which the work relates, was released to service.

(3) An ATEL service provider must provide a copy of each certificate of release to service together with a copy of any specific facility specification used for repairs or modifications carried out, to the operator of the facility.

(4) An ATEL service provider must establish a procedure for recording maintenance details and for the retention of such maintenance records.

#### **ATEL facility requirements**

171.03.7 (1) An ATEL service provider must ensure that -

- (a) each aeronautical telecommunication (ATEL) facility listed in its manual of procedures -
  - (i) is designed and installed in accordance with the provisions of Part 139 relating to the siting and construction of equipment and installations on operational areas;
  - (ii) is commissioned to meet the applicable operational specifications for that facility;
  - (iii) conforms to the applicable system characteristics and specifications standards set out in NAM-CATS-ATEL;
  - (iv) is operated, maintained, available and reliable in accordance with the required standards; and
  - (v) has been allocated an identification code or call sign, if a code or call sign is required under this Part;
- (b) information on the operational status of each ATEL facility listed in its manual of procedures, that is essential for the en-route, approach, landing, and take-off phases of flight is provided to meet the operational needs of the service being provided;
- (c) each ATEL facility listed in its manual of procedures is installed with suitable power supplies and means to ensure continuity of operation appropriate to the needs of the air traffic service or radio navigation service being supported;
- (d) each ATEL facility listed in its manual of procedures is provided with equipment redundancy or increased maintenance staffing to ensure reliability and availability of operation appropriate to the needs of the air traffic service or radio navigation service being supported;
- (e) each ATEL facility listed in its manual of procedures has sufficient and suitable spares to ensure continuity of operation appropriate to the needs of the air traffic service or radio navigation service being supported;

- (f) a security programme required under regulation 170.04.12 is established for each facility to minimise any risk of destruction of, damage to, or interference with the operation of the facility; and
- (g) any critical site area of any ATEL facility listed in its manual of procedures is -
  - (i) clearly identified on the site drawings for the ATEL facilities; and
  - (ii) physically protected by suitable signposts on the site; and
  - (iii) protected by written agreements with the site owner, aerodrome operator, and air traffic control unit, as appropriate, to ensure that site restrictions are not infringed by buildings, fences, vehicles, machinery or aircraft.

(2) An ATEL service provider who intends to operate a temporary ATEL facility to carry out site tests must establish a procedure for conducting those tests in accordance with regulation 171.04.4.

#### Documents and records to be maintained

**171.03.8** (1) An ATEL service provider must hold and maintain the following documents:

- (a) any technical manual used by the service provider at the facility; and
- (b) any documents of a kind listed in Document NAM-CATS-ATEL that relate to the provider's service.
- (2) For the purpose of subregulation (1)(a), a technical manual means -
- (a) a document, other than the manual of procedures, that contains technical information about the operation and maintenance of a facility; and
- (b) document or documents that may have been created by the equipment or facility of the manufacturer.
- (3) An ATEL service provider must ensure that -
- (a) a master copy of each document mentioned in this regulation is kept safely;
- (b) copies of documents are kept in a form that enables amendments to be made; and
- (c) any document that has been replaced cannot be used by mistake.
- (4) An ATEL service provider must retain each document that -
- (a) is given to, or is created by or for, contracted service providers;
- (b) relates to aviation safety; and
- (c) provides a history of events that relate to the design, installation, testing, operation, maintenance, modification or repair of, or changes to, each facility.

(5) A "document" for purposes of this Part includes any record of a kind mentioned in this Part and Document NAM-CATS-ATEL that is given to, or created by the ATEL service provider for use in the provision of services.

(6) A document retained under this regulation must be stored so it can be retrieved if needed for the period prescribed in regulation 170.05.6.

(7) An ATEL provider must establish a procedure for the control of the documentation required under this regulation and Part 170.

## **ATEL facility performance**

171.03.9 An ATEL service provider must establish a procedure to ensure that no ATEL facility listed in its manual of procedures is placed into operational service unless -

- (a) the person placing the ATEL facility into operational service is assessed as competent and authorised according to the procedures required under regulations 170.05.4 and 171.03.4;
- (b) the appropriate checks detailed in the operating and maintenance instructions required under this Part have been carried out to verify the performance of the ATEL facility; and
- (c) the ATEL facility record has been completed according to the procedures required under regulation 171.03.8.

#### Inspection, measuring and test equipment

**171.03.10** (1) An ATEL service provider must satisfy the Executive Director that it has the equipment, tools and material necessary to perform adequately the approved scope of work as required by the applicable equipment specifications, its manuals, and the regulations in this Part.

(2) An ATEL service provider must ensure that appropriate inspection tools, measuring and test equipment are available for the ATSEP to maintain the operation of each ATEL facility listed in its manual of procedures.

(3) An ATEL service provider must establish a procedure to control, calibrate, and maintain all the inspection tools, measuring, and test equipment to ensure that each item of equipment has the precision and accuracy that is necessary for the measurements and tests to be performed.

(4) The procedure required under subregulation (3) must require that each item of test equipment required for the measurement of critical performance parameters is -

- (a) calibrated before use or at intervals set out in Document NAM-CATS-ATEL or by the Executive Director with the calibration traceable to an appropriate Namibian standard issued under the Standards Act, 2005 (Act No. 18 of 2005);
- (b) identified with a suitable indicator to show its calibration status; and
- (c) controlled to -
- (i) safeguard against adjustments that would invalidate the calibration setting; and
- (ii) ensure that the handling, preservation, and storage of the test equipment are such that its accuracy and fitness for use is maintained.

(5) If hardware and software systems are used for the performance testing of any ATEL facility, the procedures under subregulation (3) must require the functions of those testing systems to be checked -

- (a) before being released for use; and
- (b) at intervals set out in Document NAM-CATS-ATEL or as determined by the Executive Director,

to establish that those testing systems are capable of verifying the true performance of the ATEL facility.

#### Notification of ATEL facility status

- 171.03.11 (1) A person operating an ATEL facility must, as soon as possible -
- (a) forward to the aeronautical information services (AIS) -
  - (i) information on the operational details of any new ATEL facility, for publication in the aeronautical information publication; and
  - (ii) information concerning any change in the operational status of any existing ATEL facility, for the issue of a NOTAM;
- (b) check and ensure that the information forwarded to the AIS under paragraph (a) has been accurately published; and
- (c) notify the Executive Director, as appropriate, of any incidents affecting the status of published information.

(2) An ATEL service provider must establish a procedure to ensure that the requirements of subregulation (1) are met for each applicable ATEL facility listed in its manual of procedures.

- (3) The procedure required under subregulation (2) must include a means to confirm that -
  - (a) the operational details of the ATEL facility as notified to the AIS have been accurately published in the AIP; and
  - (b) any change to the operational status of the ATEL facility has been published by a NOTAM.

#### **Interruption to services**

- 171.03.12 An ATEL service provider must -
- (a) establish procedures to be used in the event of interruption to CNS facilities;
- (b) establish procedures to be used when upgrading CNS facilities; and
- (c) specify an acceptable recovery time for each service.

# Periodic maintenance, inspection and testing

**171.03.13** (1) An ATEL service provider must establish a procedure for the periodic maintenance, inspection and testing of the ATEL facilities listed in its manual of procedures to verify that each facility meets the applicable operational requirements and performance specifications for that facility.

- (2) The procedure required under subregulation (1) must -
- (a) include ground maintenance, inspections and tests, and if necessary flight tests;
- (b) include the criteria for establishing or changing the interval between the periodic tests for each ATEL facility listed in the manual of procedures, having regard to -
  - (i) any applicable information published by the Executive Director;
  - (ii) any applicable reliability data for the ATEL facility; and
  - (iii) information on the proven reliability performance of the ATEL facility, and of other similar aeronautical facilities, and the stability of the ATEL facility's operating environment; and
- (c) ensure that the grounds for establishing or changing the interval between the periodic tests for each ATEL facility listed in the manual of procedures are documented.
- (3) An ATEL service provider must establish a programme of periodic -
- (a) ground maintenance, inspections and tests for each ATEL facility listed in its manual of procedures;
- (b) flight tests for each ATEL facility listed in its manual of procedures; and
- (c) ground check and flight tests for each radio navigation aid listed in it manual of procedure in accordance with the maximum periodicity requirements specified in subregulation (4).

(4) The maximum periodicity of ground check and flight tests of radio navigation aids referred to in subregulation (3)(c) are as follows:

- (a) Conventional Very High Frequency Omni-directional Range (CVOR) must be ground-checked once in six months and flight tested once in 12 months;
- (b) Doppler Very High Frequency Omni-directional Range (DVOR) must be groundchecked once in six months and flight tested once in 12 months;
- (c) Distance Measuring Equipment (DME) must be ground-checked once in six months and flight tested once in 12 months; and
- (d) Instrument Landing System (ILS) must be ground-checked once in three months and flight tested once in six months.

(5) An ATEL service provider must publish a NOTAM and notify the Executive Director of any radio navigation aid that has not undergone the scheduled periodic flight tests.

#### ATEL facility check after accident or incident

**171.03.14** (1) An ATEL service provider must establish a procedure to check and accurately record the operating condition of any ATEL facility operated under its certificate that may have been used by an aircraft, or an air traffic service, that is involved in an accident or incident.

- (2) The procedure required under subregulation (1) must require that -
- (a) a person is designated by the service provider to coordinate the checks;

- (b) the persons carrying out the checks required in paragraph (a) must not include anyone who was the last person to work on the facility;
- (c) the checking of the ATEL facility's operating condition is carried out as soon as possible after notification of the accident or incident to the holder of the ATEL service provider certificate;
- (d) the record of that check, and the recorded history of the ATEL facility, is kept in a secure place for possible use by any subsequent accident or incident investigation; and
- (e) the records required to be secured under paragraph (d) are retained for 10 years from the date of the last entry made on that record.

### Facility malfunction and safety incidents

**171.03.15** (1) An ATEL service provider must establish procedures for the reporting, collection, investigation and notification of facility malfunction and safety incidents.

(2) The procedures for notification required by subregulation (1) must include a procedure for notifying the Executive Director, as soon as possible, of any facility malfunction and safety incidents.

(3) The ATEL service provider must periodically compile and review reports of facility malfunctions and safety incidents in accordance with subregulation (1) to -

- (a) determine the cause of the incidents and determine any adverse trends;
- (b) implement corrective and preventive actions to eliminate the cause of a facility malfunction incident and prevent recurrence of the incidents; and
- (c) implement any measures to improve the safety performance of the CNS systems.

(4) The ATEL service provider must report any serious service failure or safety incident to the Executive Director for investigation in order to understand how and why the incident happened, including possible organisational contributing factors and to recommend actions to prevent a recurrence.

## **Records maintenance procedures**

**171.03.16** (1) An ATEL service provider must establish procedures to identify, collect, index, store, maintain, and dispose of the records covering -

- (a) the performance and maintenance history of each ATEL facility;
- (b) the establishment of the periodic test programmes for each ATEL facility;
- (c) each item of test equipment required for the measurement of critical performance parameters;
- (d) each reported or detected ATEL facility malfunction;
- (e) each internal quality assurance review; and
- (f) each person who is authorised to place ATEL facilities into operational service.

(2) The procedures required under subregulation (1) must require that accurate records of the following are maintained:

- (a) for each ATEL facility, a record -
  - (i) documenting the operating performance of the ATEL facility; and
  - (ii) providing a history of the maintenance, and the periodic inspections and tests of the ATEL facility, that are traceable to the person or persons responsible for each of the recorded activities;
- (b) for each ATEL facility, a record of the establishment of, or a change in, the periodic tests required under this Part;
- (c) for each item of test equipment that is used for the measurement of an ATEL facility's critical performance parameters, a record that includes a traceable history of the location, maintenance, and the calibration checks for the item of test equipment;
- (d) for each ATEL facility malfunction incident reported, a record that includes -
  - (i) details of the nature of the malfunction;
  - (ii) the findings of the investigation;
  - (iii) the follow up corrective actions; and
  - (iv) if applicable, a copy of the report submitted to the Executive Director;
- (e) for each person who is authorised in accordance with this Part to place ATEL facilities into operational service, a record that includes details of the person's experience, qualifications, training, competence assessments, and current authorisations.
- (3) The procedures required under subregulation (1) must require -
- (a) all records to be legible and of a permanent nature; and
- (b) all ATEL facility records required under subregulation (2)(a) to be retained for a period of at least five years.

# Quality management system

171.03.17 An ATEL service provider must establish -

- (a) a quality management system in accordance with regulation 170.04.9;
- (b) a quality assurance system for the control, supervision and the management of ATEL services that it provides in accordance regulation 170.04.9.

# Security programme

**171.03.18** An ATEL provider must, if so required under the Act or these regulations, establish a security programme referred to in regulation 170.04.12, in accordance with the standards set out in Document NAM-CATS-ATEL.

# Common reference systems for use in ATEL

**171.03.19** Subject to any standard units of measurement prescribed under Part 2, an ATEL service provider must use -

- (a) the Gregorian calendar and Coordinated Universal Time (UTC) expressed in hours' minutes and seconds of the 24-hour day where midnight is designated as 2400 for the end of the day and 0000 for the beginning of the day, as the temporal reference system;
- (b) Mean Sea Level (MSL) as the vertical reference system; and
- (c) World Geodetic System: 1984 (WGS-84) as the horizontal (geodetic) reference system.

# SUBPART 4 OPERATING REQUIREMENTS

#### **Continued compliance**

171.04.1 An ATEL service provider must -

- (a) continue to meet the standards and comply with the certification requirements prescribed in this Part and Part 170;
- (b) continue to meet the requirements of this Part and the standards for communication, navigation and surveillance systems; and
- (c) comply with all procedures specified in its manual of procedures and associated technical manuals and procedures.

# **Operating and maintenance instructions**

171.04.2 (1) An ATEL service provider must -

- (a) have operating and maintenance instructions that set out the requirements for operating and maintaining each ATEL facility listed in its manual of procedures; and
- (b) provide the operating and maintenance instructions required under paragraph (a) for the use and guidance of its personnel.

(2) The operating and maintenance instructions required under subregulation (1)(a) must include -

- (a) details of the critical performance parameters for each ATEL facility;
- (b) the associated minimum performance levels for those critical performance parameters referred to in paragraph (a);
- (c) details of the test equipment required for the measurement of those critical performance parameters referred to in paragraph (a); and
- (d) details of the mandatory inspection and test procedures for the operation and maintenance of each ATEL facility.

# Deviations

**171.04.3** (1) If an emergency, including a disruption, necessitates immediate action for the protection of life, property and the environment and the action involves an aircraft operation, the holder of an ATEL service certificate may, subject to limitations of its certificate, deviate from any requirement of this Part.

(2) The holder of an ATEL service certificate who deviates from a requirement of this Part under subregulation (1) must -

- (a) provide a written report to the Executive Director as soon as possible, but in any event not later than 14 days, after the emergency; and
- (b) include in the report required under paragraph (a) the cause, if known, nature, extent, and duration of the deviation.

# **Temporary ATEL facility**

**171.04.4** If a temporary ATEL facility is operated for the purpose of a site test, an ATEL service provider is not required to comply with certification requirements of Subpart 3, except that the ATEL service provider must -

- (a) establish procedures for conducting those tests;
- (b) ensure that the operation of the facility does not cause interference with any other operating ATEL facility;
- (c) forward information regarding operation of the temporary facility to the AIS for the issuance of a NOTAM; and
- (d) ensure that an appropriate NOTAM has been published before operating the temporary facility.

# Limitations on ATEL service provider

**171.04.5** (1) Except for the operation of a temporary ATEL facility for site tests, an ATEL service provider may not permit an ATEL facility to continue in operational service if the provider has any cause to suspect or doubt the integrity of the information being provided by the facility.

(2) An ATEL service provider may not operate a radio transmitting ATEL facility on an aeronautical radio frequency except under a radio apparatus licence granted by CRAN.

(3) Except where a deviation is required under or a site test is carried out according to the procedures required under this Part, an ATEL service provider may not operate an ATEL facility under the authority of that certificate unless -

- (a) the ATEL facility is listed in the service provider's manual of procedures;
- (b) the performance of the ATEL facility meets the applicable information published for that facility under this Part and in Document NAM-CATS-ATEL;
- (c) the performance of the ATEL facility meets the applicable requirements of this Part and of Document NAM-CATS-ATEL;

- (d) any integrity monitoring system for the ATEL facility is fully functional;
- (e) all the periodic maintenance for the ATEL facility are completed according to the programmes established under this Part;
- (f) the ATEL facility is included in the service provider's security programme;
- (g) the destruction, damage, or interference with the ATEL facility is not likely to endanger the safety of an aircraft in flight; and
- (h) where paragraph (f) applies, the requirements of the security programme for the ATEL facility are being complied with.

#### Interface arrangement for support services

171.04.6 An ATEL service provider must formalise interface arrangements where applicable with external organisations in the form of service level agreements, detailing the following:

- (a) the interface and functional specifications of the support service;
- (b) the service level of the support service such as continuity, availability, accuracy, integrity and recovery time of failure of service; and
- (c) the monitoring and reporting of the operational status of the service to the service provider.

#### **Operation and maintenance plan**

**171.04.7** (1) An ATEL service provider must establish an overall operation and maintenance programme to ensure continuous operation and monitoring of the ATEL services it provides.

- (2) All ATEL facilities must -
- (a) be maintained for normal operations on a routine basis;
- (b) meet the required level of continuity, reliability and availability;
- (c) provide for the timely and appropriate detection and warning of system failures and degradations;
- (d) include documentation on the consequences of system, sub-system and equipment failures and degradations; and
- (e) include measures to control the probability of failures and degradations.

(3) In addition to the overall operation and maintenance programme, the ATEL service provider must establish an operation and maintenance plan for each facility which must include -

- (a) a procedure for the periodic maintenance, inspection and testing of each ATEL facility to verify that it meets the operational and performance specifications of that facility;
- (b) details of any flight test, if necessary, such as the standards and procedures to be used and flight test interval;

- (c) the interval between the periodic maintenance, inspection and the flight test and the basis for that interval including changes to such interval and the reasons for the changes;
- (d) the operation and maintenance instructions for each ATEL facility;
- (e) an analysis of the number of personnel required to operate and maintain each ATEL facility taking into account the workload required;
- (f) the corrective plan and procedures for each ATEL facility, including, whether the repair of modules and component are undertaken in-house or by equipment manufacturers; and
- (g) the spare support plan for each ATEL facility.

(4) Where the system established by the ATEL service provider allows for continuous monitoring of all CNS systems from a centralised management control room which allows for immediate detection and alerting of malfunctions or deviations from specified performance requirements, the routine ground testing of the ATEL facilities may not be necessary.

#### Safety case

**171.04.8** An ATEL service provider must ensure that a safety case, or equivalent, is conducted for critical systems before commissioning and periodic maintenance in accordance with the requirements set out in Document NAM-CATS-ATEL.

#### **Commissioning of new facilities**

171.04.9 (1) An ATEL service provider must ensure that each new ATEL facility is -

- (a) commissioned to meet the specification standards for that facility; and
- (b) installed in compliance with the requirements prescribed in this Part and the specification standards set out in Document NAM-CATS-ATEL before commissioning.

(2) The ATEL service provider must ensure that the system performance of the new ATEL facility has been validated by the necessary tests, and that all parties involved with the operations and maintenance of the ATEL facility, including its maintenance contractors have accepted and are satisfied with the results of the tests.

(3) The ATEL service provider must ensure that procedures include documentation of tests conducted on the ATEL facility prior to the commissioning, including those that test the compliance of the facility with the applicable standards set out in Document NAM-CATS-ATEL and any flight check required in compliance with this Part.

# Radio site approval

**171.04.10** (1) A person may not install a radio site, unless that person has obtained the prior approval of the Executive Director to do so.

(2) An application to install a radio site must be submitted to the Executive Director in accordance with requirements set out in Document NAM-CATS-ATEL.

(3) The Executive Director must grant a certificate of approval if the Executive Director is satisfied -

- (a) as to the intended purpose of the equipment; and
- (b) that the person or organisation is competent to install or operate the equipment and that the equipment is fit for its intended purpose.
- (4) The person applying for an approval must notify the Executive Director of the type, and availability, of any service which is available for use by any aircraft.

(5) The Executive Director may approve a person or organisation to provide particular services in connection with approved equipment.

(6) The Executive Director may require the flight calibration and commissioning of such equipment by an authorised person or organisation.

(7) The Executive Director may require that the information in subregulation (4) be published in a NOTAM or in the AIP.

# Frequencies, identification codes and call signs

171.04.11 (1) A person may not operate -

- (a) a radio navigation aid, unless the radio navigation aid has been assigned an operating frequency and identification code by the Executive Director;
- (b) a radio communication transmitter on an aeronautical radio frequency spectrum, unless it has been assigned an operating frequency and call sign by the Executive Director,

and a radio apparatus licence has been granted by CRAN.

(2) The Executive Director must allocate an identification code for a navigation aid or call sign for an aeronautical radio communication facility if he or she is satisfied that the allocation of a code or call sign is not contrary to the interest of aviation safety.

# **Protection of radio sites**

**171.04.12** (1) A radio site must be protected in accordance with requirements set out in Document NAM-CATS-ATEL.

(2) A person may not allow a structure or object, whether natural or artificial, which has the potential of interfering or degrading radio signals for the purpose of aviation safety, to come in existence or to move or be moved within the surfaces and slopes of radio navigation aids sites.

#### Interference with radio signals

**171.04.13** (1) An ATEL provider must notify the Executive Director as soon as possible, of any electromagnetic interference to any facility providing radio signals, or any source of interference degrading radio signals.

(2) The Executive Director must upon being notified of the interference with radio signals in terms of subregulation (1), require CRAN to investigate, or cause to be investigated, all reports of interference, and may require further action to be taken.

- (3) The ATEL service provider must ensure that -
- (a) there is no intentional transmission of unnecessary or anonymous radio signals, messages or data by any of its radio stations;
- (b) arrangements are made with CRAN to address occurrence of radio frequency interference and for reporting of any frequency interference occurrence; and
- (c) radio frequency interference occurrences are investigated and follow-up actions are taken to prevent recurrence.

#### Information provided by ATEL facility

171.04.14 A person may not allow a facility providing radio signals for the purpose of aviation safety to continue in operation, if there is any reasonable cause to suspect that the information being provided by that facility is erroneous.

#### Test transmissions

171.04.15 (1) An ATEL service provider may make a test transmission if -

- (a) the transmission is necessary to test a service, ATEL facility or equipment; and
- (b) within a reasonable time before commencing the transmission, the users have been informed about the transmission.
- (2) An ATEL service provider must ensure that -
- (a) no test transmission for the purpose of evaluating a radio site, or the operational viability of an ATEL facility or equipment, for the purpose of aviation safety, is done without the prior approval of the Executive Director;
- (b) the Executive Director is notified as to the purpose and duration of such test transmission;
- (c) the test transmission contains information indicating that it is a test transmission and complies with any requirements set out in Document NAM-CATS-ATEL;
- (d) frequencies allocated for the purpose of testing are valid for the duration of the test only; and
- (e) the operation of a temporary ATEL facility does not cause any interference with any other operational facility.

#### Safety management system

171.04.16 An ATEL service provider must establish, implement, and maintain a system for safety management in accordance with Part 170.

# Station (site) logs

171.04.17 An ATEL service provider must keep site logs for all facilities used to provide an ATEL service or a radio navigation service as set out in Document NAM-CATS-ATEL.

# SUBPART 5 STANDARDS FOR ATEL FACILITIES AND SERVICES

# **Radio navigation aids**

**171.05.1** (1) An ATEL service provider must ensure that radio navigation aids used for air navigation comply with the specification standards set out in Document NAM-CATS-ATEL.

(2) An ATEL service provider must observe human factor principles in the design and certification of radio navigation aids.

# Communication procedures including those with PANS status

**171.05.2** An ATEL service provider must ensure that communication procedures including those with Procedures for Air Navigation Services (PANS) status comply with the specification standards set out in Document NAM-CATS-ATEL.

# **Communication systems**

**171.05.3** (1) An ATEL service provider must ensure that digital data communication systems provided for use in air navigation comply with specifications standards set out in Document NAM-CATS-ATEL.

(2) An ATEL service provider must ensure that voice communication systems provided for air navigation including air-to-ground, ground-to-air and ground-to-ground communication systems comply with specification standards set out in Document NAM-CATS-ATEL.

(3) An ATEL service provider must observe human factor principles in the design and certification of communication systems.

# Surveillance and collision avoidance systems

**171.05.4** (1) An ATEL service provider must ensure that surveillance and collision avoidance systems provided for air navigation comply with specification standards set out in Document NAM-CATS-ATEL.

(2) An ATEL service provider must observe human factor principles in the design and certification of surveillance and collision avoidance systems.

# Aeronautical radio frequency spectrum utilisation

**171.05.5** An ATEL service provider must ensure that the utilisation of aeronautical radio frequency spectrum in air navigation complies with specification standards set out in Document NAM-CATS-ATEL.

# Other facilities used to provide ATS, MET, AIS, SAR and PANS-OPS

**171.05.6** An ATEL service provider must ensure that all facilities used to provide ATS, AIS, SAR, MET and PANS-OPS comply with specification standards set out in Document NAM-CATS-ATEL.".

# Substitution of Part 172 of Regulations

8. The Regulations are amended by the substitution for Part 172 of the following Part:

# "PART 172 AIR NAVIGATION SERVICES: AIR TRAFFIC SERVICES

# LIST OF REGULATIONS

# **SUBPART 1: GENERAL**

- 172.01.1 Definitions for this Part
- 172.01.2 Applicability
- 172.01.3 Standards for provision of air traffic services

# SUBPART 2: CERTIFICATION OF ATS PROVIDERS

- 172.02.1 Requirement for certification
- 172.02.2 Application for certificate or amendment thereof
- 172.02.3 Issue of ATS provider certificate
- 172.02.4 Renewal of ATS provider certificate
- 172.02.5 Duplicate certificate
- 172.02.6 Privileges of ATS provider certificate holder

# SUBPART 3: GENERAL OBLIGATIONS OF AIR TRAFFIC SERVICE PROVIDERS

- 172.03.1 Manual of procedures
- 172.03.2 ATS provider organisation
- 172.03.3 Personnel requirements
- 172.03.4 Training and competency of ATS personnel
- 172.03.5 ATS facilities and equipment
- 172.03.6 Agreements with aeronautical telecommunications service providers
- 172.03.7 Agreements with aerodrome operators
- 172.03.8 Arrangements for transfer of information
- 172.03.9 Quality management system
- 172.03.10 Fatigue management system
- 172.03.11 Security programme
- 172.03.12 ATS station standing instructions
- 172.03.13 Documentation
- 172.03.14 Documents and records
- 172.03.15 Documents and records control system
- 172.03.16 Deviation from air traffic service standards

# SUBPART 4: ESTABLISHMENT AND PROVISION OF AIR TRAFFIC SERVICES

- 172.04.1 Provision of air traffic services
- 172.04.2 Objectives of air traffic services
- 172.04.3 Divisions of air traffic services
- 172.04.4 Determination of the need for air traffic services
- 172.04.5 Designation of the portions of airspace and controlled aerodromes for provision of air traffic services
- 172.04.6 Classification of airspace
- 172.04.7 Performance-based navigation (PBN) operations
- 172.04.8 Performance-based communication (PBC) operations
- 172.04.9 Performance-based surveillance (PBS) operations

- 172.04.10 Establishment and designation of units providing air traffic services
- 172.04.11 Specifications for flight information regions, control areas and control zones
- 172.04.12 Identification of air traffic service units and airspaces
- 172.04.13 Establishment and identification of air traffic service routes
- 172.04.14 Establishment of change-over points
- 172.04.15 Establishment and identification of significant points
- 172.04.16 Establishment and identification of standard routes for taxiing aircraft
- 172.04.17 Coordination between air traffic services and the operators
- 172.04.18 Coordination between air traffic services and military authorities
- 172.04.19 Coordination of activities potentially hazardous to civil aircraft
- 172.04.20 Determination and reporting of ATS related aeronautical data
- 172.04.21 Coordination between meteorological and air traffic services authorities
- 172.04.22 Coordination between aeronautical information services and air traffic services authorities
- 172.04.23 Minimum flight altitudes
- 172.04.24 Service to aircraft in case of emergency
- 172.04.25 In-flight contingencies: strayed or unidentified aircraft
- 172.04.26 In-flight contingencies: interception of civil aircraft
- 172.04.27 Time in air traffic services
- 172.04.28 Requirements for carriage and operation of pressure-altitude reporting transponders
- 172.04.29 Safety management and prevention of runway incursions
- 172.04.30 Common reference systems
- 172.04.31 Language proficiency
- 172.04.32 Contingency arrangements
- 172.04.33 Identification and delineation of prohibited, restricted and danger areas
- 172.04.34 Flight procedure design service

# SUBPART 5: REQUIREMENTS FOR PROVISION OF AIR TRAFFIC CONTROL SERVICES

- 172.05.1 Provision of air traffic control service
- 172.05.2Air traffic control units
- 172.05.3 Operation of air traffic control service
- 172.05.4 Separation minima
- 172.05.5 Responsibility for control of aircraft
- 172.05.6 Transfer of responsibility for control
- 172.05.7 Air traffic control clearances
- 172.05.8 ATS system capacity and air traffic flow management
- 172.05.9 Control of persons and vehicles at aerodromes
- 172.05.10 Provision of radar and ADS-B alert and warning systems
- 172.05.11 Use of surface movement radar

# SUBPART 6: REQUIREMENTS FOR FLIGHT INFORMATION SERVICE

- 172.06.1 Application of flight information service
- 172.06.2 Scope of flight information service
- 172.06.3 Operational flight information service broadcasts
- 172.06.4 VOLMET broadcasts and D-VOLMET service

# SUBPART 7: REQUIREMENTS FOR ALERTING SERVICE

- 172.07.1 Application of alerting service
- 172.07.2 Notification of rescue coordination centres
- 172.07.3 Use of communication facilities
- 172.07.4 Plotting aircraft in state of emergency

- 172.07.5 Information to operator of aircraft in emergency
- 172.07.6 Information to aircraft operating in vicinity of an aircraft in state of emergency
- 172.07.7 Handling and reporting accidents and incidents

# SUBPART 8: AIR TRAFFIC SERVICES REQUIREMENTS FOR COMMUNICATION

- 172.08.1 Aeronautical mobile service (air-ground communication)
- 172.08.2 Aeronautical fixed service (ground-ground communication)
- 172.08.3 Surface movement control service
- 172.08.4 Aeronautical radio navigation service

# SUBPART 9: AIR TRAFFIC SERVICE REQUIREMENTS FOR INFORMATION

- 172.09.1 Meteorological information
- 172.09.2 Information on aerodrome conditions and operational status of associated facilities
- 172.09.3 Information on operational status of navigation services
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# SUBPART 10: SPECIAL PROCEDURES

- 172.10.1 General
- 172.10.2 Fuel dumping
- 172.10.3 Photographic survey flights
- 172.10.4 Repetitive flight plans
- 172.10.5 Letters of agreement
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- 172.10.7 Coordination in cases of State aircraft without RNAV capability
- 172.10.8 Coordination in respect of provision of air traffic advisory service
- 172.10.9 Coordination between ATS units and aeronautical telecommunication stations
- 172.10.10 Radio communication failure
- 172.10.11 Degradation of aircraft position source data
- 172.10.12 Emergency descent
- 172.10.13 Other ATC contingency procedures
- 172.10.14 Loss of Vertical Navigation Performance Required for Reduced Vertical Separation Minimum (RVSM)
- 172.10.15 Air traffice service messages
- 172.10.16 Responsibility in regard to military traffic
- 172.10.17 Air traffic incident reports
- 172.10.18 Strategic lateral offset procedures
- 172.10.19 Notification of suspected communicable diseases or public health risk aboard aircraft
- 172.10.20 Coordination in respect of provision of ATC service
- 172.10.21 Coordination in respect of provision of flight information service and alerting service
- 172.10.22 Procedures for ATS units when volcanic ash cloud is reported or forecast
- 172.10.23 Responsibility in regard to unmanned free balloons

# SUBPART 11: ADMINISTRATIVE PROCEDURES

- 172.11.1 Opening and closing of control positions
- 172.11.2 Fire prevention and facility evacuation
- 172.11.3 ATS unit forms, logs, libraries and directives

# SUBPART 1 GENERAL

# **Definitions for this Part**

**172.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-ATS.

(2) In this Part, "air traffic service (ATS)" means an air traffic service as described in regulation 172.04.3.

# Applicability

172.01.2 (1) This Part -

- (a) prescribes the general and operating requirements for organisations providing an air traffic service (ATS) in Namibia and in the Windhoek Flight Information Region;
- (b) prescribes the specific technical standards for the provision of air traffic services in Namibia and in the Windhoek Flight Information Region;
- (c) applies to the provision of air traffic services -
  - (i) at aerodromes in Namibia;
  - (ii) in the airspaces over Namibia; and
  - (iii) in the airspace over the high seas administered by Namibia;
- (d) applies to a person who wishes to become, or is, an air traffic service provider; and
- (e) sets out certain administrative rules applying to the Executive Director in the administration of this Part;
- (2) This Part does not apply to -
- (a) a person who is providing air traffic services to military aircraft within designated military airspaces in the course of their duties, for the Namibian Defence Force; or
- (b) any air traffic services provided to military aircraft within designated military airspaces for the Namibian Defence Force.

# **Standards for provision of air traffic services**

- 172.01.3 An ATS provider must provide services in full compliance with -
- (a) the general requirements prescribed in Part 170;
- (b) the requirements prescribed in this Part;
- (c) the requirements of any other Parts referred to in this Part;
- (d) the provisions set out or referred to in the current version of ICAO Annex 11;
- (e) the standards set out or referred to in the current version of ICAO Doc 4444 and any relevant ICAO Documents;

- (g) any applicable standards set out in Document NAM-CATS-ATS;
- (h) the provisions of the Authority's Procedures for Air Traffic Management and any other relevant Authority documents; and
- (i) the ATS provider's manual of procedures.

# SUBPART 2 CERTIFICATION OF ATS PROVIDERS

#### **Requirement for certification**

**172.02.1** A person may not provide an air traffic service except, under the authority of, and in accordance with the provisions of a certificate issued under this Part, the requirements prescribed in Part 170, and the standards set out in Document NAM-CATS-ATS.

#### Application for certificate or amendment thereof

172.02.2 An application for the issuing of an ATS service provider certificate, or an amendment thereof, must be -

- (a) made to the Executive Director in the appropriate form set out in Document NAM-CATS-ATS; and
- (b) accompanied by the -
  - (i) manual of procedures referred to in regulation 172.03.1;
  - (ii) appropriate fee as prescribed in Part 187.

# **Issue of ATS provider certificate**

**172.02.3** (1) The Executive Director may issue an ATS provider certificate, if the Executive Director is satisfied that -

- (a) the applicant meets the requirements prescribed in Part 170 and this Part;
- (b) the applicant's personnel required by this Part are competent to perform their respective duties;
- (c) the applicant's senior personnel have not held a senior position in an organisation whose certificate was revoked by the Executive Director; and
- (d) the issuing of the certificate is not contrary to the interests of aviation safety.

(2) The ATS provider certificate referred to in subregulation (1) is issued in the appropriate form, and contains the information, set out in Document NAM-CATS-ATS.

# **Renewal of ATS provider certificate**

**172.02.4** (1) An application for the renewal of an ATS provider certificate, must be -

(a) made to the Executive Director on the appropriate form set out in Document NAM-CATS-ATS; and

(b) accompanied by the -

- (i) manual regulation of procedures referred to in 172.03.1; and
- (ii) appropriate fee as prescribed in Part 187.

(2) The holder of a certificate must, if it wishes to renew the certificate, at least 90 days immediately preceding the date on which the ATS provider certificate expires, apply to the Executive Director for the renewal of such certificate.

# **Duplicate certificate**

172.02.5(1)An application for a duplicate certificate as contemplated in Part170 must be -

- (a) made in the appropriate form set out in Document NAM-CATS-ATS; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(2) A duplicate of the certificate is issued on the appropriate form set out in Document NAM-CATS-ATS.

# Privileges of ATS provider certificate holder

**172.02.6** The privileges of an ATS provider certificate are limited to the services authorised by the certificate and the appropriate specifications set out in Document NAM-CATS-ATS.

#### SUBPART 3 GENERAL OBLIGATIONS OF AIR TRAFFIC SERVICE PROVIDERS

# Manual of procedures

172.03.1 The holder of an ATS provider certificate must at all times, maintain a manual of procedures that -

- (a) complies with the requirements of this Part and of Part 170; and
- (b) contains the information set out in Document NAM-CATS-ATS.

# **ATS provider organisation**

**172.03.2** (1) An ATS provider must, at all times, maintain an appropriate organisation with sound and effective management structure to enable it to provide, in accordance with the standards set out in Document NAM-CATS-ATS, the services covered by its certificate.

(2) An ATS provider must establish in its organisational structures, ATS systems, functions and activities and management and operational positions necessary for the safe and efficient provision of the air traffic services.

# **Personnel requirements**

**172.03.3** (1) An ATS provider must engage, employ or contract sufficient, competent and qualified personnel as required under Part 170, to provide the air traffic services.

(2) An ATS provider must establish a procedure for determining the required number of air traffic service personnel and the procedures for their recruitment and progression.

- (3) An ATS provider must establish procedures to -
- (a) ensure the competence of those personnel who are authorised by the ATS provider to provide the air traffic services, and training and assessment for those services, listed in its manual of procedures;
- (b) provide those authorised personnel with written evidence of the scope of their authorisation;
- (c) ensure that those authorised personnel hold appropriate current licences and ratings issued under the Act and in accordance with Part 65;
- (d) ensure, where practicable, that authorised personnel only exercise the privileges of their rating or ratings if they are familiar with all relevant and current information;
- (e) facilitate, for rated air traffic service licence holders, compliance with the current experience requirements of Part 65; and
- (f) ensure, where practicable, that an air traffic controller does not exercise the privileges of his or her rating or ratings -
  - (i) unless he or she complies with any endorsements on his or her medical certificate; and
  - (ii) when any decrease in his or her medical fitness might render him or her unable to safely exercise those privileges.

# Training and competency of ATS personnel

**172.03.4** (1) An ATS provider may not give to a person responsibility for an air traffic control function to be performed in connection with any air traffic service that it provides unless the person -

- (a) holds an ATS licence with a rating issued in terms of Part 65 for the function and an endorsement for the controlled aerodrome for which, or the airspace in relation to which, the person performs the function; or
- (b) performs the function under the supervision of another person who holds an ATS licence with a rating issued in terms of Part 65 for the function and an endorsement for the controlled aerodrome for which, or the airspace in relation to which, the person performs the function.

(2) An ATS provider may not give to a person the responsibility for providing an air traffic control function in connection with any air traffic service that it provides, if the person is subject to a direction in terms of Part 65.

(3) An ATS provider may not give to a person responsibility for an air traffic control function, unless that person undergoes regular competency training in accordance with Parts 65 and 170, and any requirements set out in Document NAM-CATS-ATS.

(4) An ATS provider must have in place a training policy and programme with basic, specialisation, and continuation trainings to ensure that all air traffic service activities can be performed.

(5) An ATS provider must maintain individual training records for each of its staff in accordance with the provisions of Part 170.

# ATS facilities and equipment

**172.03.5** (1) An ATS provider must, at all times, make available for use by its personnel the equipment and facilities necessary for providing, in accordance with the standards set out in Document NAM-CATS-ATS, the air traffic services covered by its certificate.

(2) An ATS provider must establish ATS systems, including facilities and equipment, accommodation and all types of communications, navigation and surveillance equipment required to accomplish the air traffic service objectives.

(3) The equipment and facilities required by this regulation must be in accordance with the standards set out in Document NAM-CATS-ATS.

(4) If the ATS provider uses a control tower in providing an air traffic service, the provider must ensure the control tower is designed, sited, constructed, equipped and maintained in accordance with the standards set out in Document NAM-CATS-ATS.

# Agreements with aeronautical telecommunications service providers

**172.03.6** (1) An ATS provider, other than an ATS provider that is also an aeronautical telecommunications service provider, must have an agreement with an ATEL service provider for the provision of any aeronautical telecommunication services provided to it by the aeronautical telecommunications service provider.

(2) An agreement, required under subregulation (1), must be in accordance with standards set out in Document NAM-CATS-ATS.

# Agreements with aerodrome operators

**172.03.7** (1) An ATS provider, other than an ATS provider that is also an aerodrome operator, providing an air traffic service for a controlled aerodrome, must have an agreement with the aerodrome operator covering the arrangements for controlling aircraft, vehicles and people on the manoeuvring area of the aerodrome.

(2) An agreement, under subregulation (1), must be in accordance with the standards set out in Document NAM-CATS-ATS.

# Arrangements for transfer of information

**172.03.8** (1) An ATS provider must have, at all times, adequate arrangements to ensure that it gets, and will continue to get, the services and information necessary to provide the air traffic services covered by its certificate.

(2) An ATS provider must have, at all times, adequate arrangements to ensure that it is able, and will continue to be able, to provide information in connection with any of those air traffic services to another person whose duties or functions reasonably require that information.

# Quality management system

172.03.9 An ATS provider must establish a quality management system in accordance with the -

- (a) requirements of Part 170; and
- (b) standards set out in Document NAM-CATS-ATS.

# Fatigue management system

**172.03.10** (1) If required to do so, an ATS provider must have, and put into effect, a system that includes the policies, procedures and rostering practices necessary to facilitate the management of fatigue among operational staff, and in particular, those staff providing air traffic control services.

- (2) An ATS provider must either -
- (a) comply with all of the duty period limitations and rest requirements; or
- (b) implement a comprehensive fatigue risk management system (FRMS) that provides an equivalent level of safety to the duty period and rest requirements.

(3) The the maximum and minimum duty hours or days and rest periods are prescribed in Part 65.

(4) The ATS provider when establishing a system for the management of fatigue related safety risks must follow the requirements set out in Document NAM-CATS-ATS.

#### Security programme

**172.03.11** An ATS provider must, if so required under the Act or these regulations, establish a security programme referred to in regulation 170.04.12, in accordance with the standards set out in Document NAM-CATS-ATS.

# **ATS station standing instructions**

172.03.12 An ATS provider must provide for each air traffic service unit listed in its manual of procedures station standing instructions which must -

- (a) set out the procedures for the operation of the air traffic service unit concerned; and
- (b) contain the information set out in Document NAM-CATS-ATS.

# Documentation

172.03.13 An ATS provider must provide each air traffic service unit listed in its manual of procedures with copies of the documentation set out in Document NAM-CATS-ATS.

# **Documents and records**

172.03.14 An ATS provider must -

- (a) keep documents and records of the kinds set out in Document NAM-CATS-ATS;
- (b) retain documents or records for the periods set out in Document NAM-CATS-ATS for particular kind of document or record; and
- (c) at the request of the Executive Director or of an authorised officer, inspector or authorised person, make the documents and records, or copies of them or extracts from them, available for inspection.

# Documents and records control system

**172.03.15** (1) An ATS provider must establish, and put into effect, a system for controlling documents and records relating to the air traffic services that it provides, including the policies and procedures for making, amending, preserving and disposing of those documents and records.

(2) The documents and records control system must be in accordance with the requirements of Part 170 and the standards set out in Document NAM-CATS-ATS.

# Deviation from air traffic service standards

**172.03.16** (1) An ATS provider must ensure that any air traffic service that it provides is provided in accordance with this Part, the associated technical standards, the procedures for air traffic management and the procedures and practices in the provider's ATS manual of procedures.

(2) Any deviation from the standards must comply with the requirements set out in Document NAM-CATS-ATS.

# **SUBPART 4**

# ESTABLISHMENT AND PROVISION OF AIR TRAFFIC SERVICES

# **Provision of air traffic services**

172.04.1 (1) The Executive Director must determine and publish under Part 71 -

- (a) the portions of airspace and the aerodromes which must be provided with air traffic services;
- (b) the level and the type of air traffic services to be provided in portions of airspace or at aerodromes determined in accordance with paragraph (a).
- (2) The Executive Director, by mutual agreement, may-
- (a) delegate to another State, the responsibility for establishment and provision of air traffic services in the flight information region, control areas or control zones extending over the territory of Namibia; and
- (b) where such responsibility has, under paragraph (a), been delegated to another State, that State must provide the services in accordance with this Part.

(3) Where the Executive Director in accordance with subregulation (2) has delegated to another State the responsibility for provision of air traffic services, the Executive Director -

- (a) must establish such facilities and services as may be required by the providing State; and
- (b) may not withdraw or modify such facilities and services without prior consultation with the providing State.

(4) Where the provision of air traffic services has been delegated to another State in accordance with this regulation, both the Executive Director and the providing State may terminate the agreement between them at any time.

(5) The Executive Director must, on the basis of regional air navigation agreements, establish and ensure provision of air traffic services to those portions of airspace over the high seas or in airspace of undetermined sovereignty.

- (6) The Executive Director must -
- (a) determine the need for the provision of air traffic services in the airspace referred to in subregulation (5); and
- (b) designate the air traffic services authority responsible for establishing and providing such services in that airspace.

(7) The establishment and provision of air traffic services to either part or whole of a flight along a route or portion of a route must be in accordance with the standards set out in Document NAM-CATS-ATS.

(8) Where air traffic services are established, the Executive Director must publish the information in the aeronautical information publication (AIP) as necessary to permit the utilisation of such services.

# **Objectives of air traffic services**

- 172.04.2 The objectives of an air traffic service are to -
- (a) prevent collisions between aircraft;
- (b) prevent collisions between aircraft on the manoeuvring area and obstruction on that area;
- (c) maintain a safe, orderly and expeditious flow of air traffic;
- (d) provide advice and information useful for the safe and efficient conduct of flights; and
- (e) notify appropriate organisations regarding aircraft in need of search and rescue aid and assist such organisations as required.

# Divisions of air traffic services

- 172.04.3 Air traffic services comprise of the following three services:
- (a) the air traffic control service, to accomplish the objectives set out in regulation 172.04.2(1)(a), (b) and (c), and this service is divided in three parts as follows:
  - (i) area control service: the provision of air traffic control service for controlled flights, except for those parts of such flights described in subparagraphs
    (ii) and (iii), in order to accomplish the objectives set out in regulation 172.04.2(1) (a) and (c);
  - (ii) approach control service: the provision of air traffic control service for controlled flights associated with arrival or departure, in order to accomplish the objectives set out in regulation 172.04.2 (1)(a) and (c); and
  - (iii) aerodrome control service: the provision of air traffic control service for aerodrome traffic, except for those parts of flights described in subparagraph

(ii), in order to accomplish the objectives set out regulation 172.04.2 (1)(a),(b) and (c);

- (b) flight information service: to accomplish the objective set out in regulation 172.04.2 (1) (d);and
- (c) alerting service: to accomplish the objective set out in regulation 172.04.2 (1)(e).

# Determination of need for air traffic services

**172.04.4** The Executive Director must determine the need for the provision of an air traffic servicein a given area or location in accordance with the standards set out in Document NAM-CATS-ATS.

# Designation of portions of airspace and controlled aerodromes for provision of air traffic services

**172.04.5** Subject to compliance with the provisions of Part 71, the Executive Director must designate particular portions of the airspace and controlled aerodromes in accordance with the standards set out in Document NAM-CATS-ATS.

#### **Classification of airspace**

**172.04.6** Subject to compliance with the provisions in Part 71, the Executive Director must classify and designate ATS airspaces appropriate to the needs of Namibia in accordance with the standards set out in Document NAM-CATS-ATS.

#### Performance-based navigation (PBN) operations

**172.04.7** (1) The Executive Director must determine navigation specifications for use in the application of performance-based navigation as required under Part 90 and in accordance with the standards set out in Document NAM-CATS-ATS.

(2) Where it is determined that performance-based navigation operations are required in a specified airspace or at an aerodrome, the ATS provider responsible for the provision of air traffic services within that airspace, or at that aerodrome, must implement performance based navigation in accordance with requirements determined by the Executive Director.

#### Performance-based communication (PBC) operations

**172.04.8** An ATS provider must ensure that the requirements for, and application of performance-based communication (PBC) operations are in accordance with the standards set out in Document NAM-CATS-ATS.

#### Performance-based surveillance (PBS) operations

**172.04.9** An ATS provider must ensure that the requirements for, and application of performance-based surveillance (PBS) operations are in accordance with the standards set out in Document NAM-CATS-ATS.

#### Establishment and designation of units providing air traffic services

**172.04.10** An ATS provider must establish and designate units providing air traffic services in accordance with the standards set out in Document NAM-CATS-ATS.

# Specifications for flight information regions, control areas and control zones

**172.04.11** (1) The delineation of the airspace wherein air traffic services are to be provided, and the specifications thereof must be in accordance with the standards set out in Document NAM-CATS -ATS.

(2) The Executive Director may enter into agreements with neighbouring States to permit the delineation of airspace lying across national boundaries to facilitate the provision of air traffic services.

# Identification of air traffic service units and airspaces

172.04.12 An ATS provider must establish and identify air traffic services units and airspaces in accordance with the standards set out in Document NAM-CATS-ATS.

# Establishment and identification of air traffic service routes

172.04.13 An ATS provider must establish and identify air traffic service routes in accordance with the standards set out in Document NAM-CATS-ATS.

# Establishment of change-over points

172.04.14 An ATS provider establish change-over points on air traffic service route segments in accordance with the standards set out in Document NAM-CATS -ATS.

# Establishment and identification of significant points

172.04.15 An ATS provider must establish and identify significant points in accordance with the standards set out in Document NAM-CATS-ATS.

# Establishment and identification of standard routes for taxiing aircraft

172.04.16 An ATS provider must establish and identify standard routes for taxiing aircraft in accordance with the standards set out in Document NAM-CATS –ATS.

# Coordination between air traffic services and operators

**172.04.17** An ATS provider must establish procedures for coordination between air traffic services and aircraft operators in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination between air traffic services and military authorities

**172.04.18** An ATS provider must establish procedures for coordination between air traffic services and military authorities in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination of activities potentially hazardous to civil aircraft

**172.04.19** An ATS provider must establish procedures for coordination of activities potentially hazardous to civil aircraft in accordance with the standards set out in Document NAM-CATS-ATS.

# Determination and reporting of ATS related aeronautical data

**172.04.20** An air traffic service provider must determine and report air traffic servicesrelated aeronautical data in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination between meteorological and air traffic services authorities

**172.04.21** An ATS provider must establish procedures for coordination between the meteorological services and a unit providing air traffic services in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination between aeronautical information services and air traffic services authorities

**172.04.22** An ATS provider must establish procedures for coordination between aeronautical information services and a unit providing air traffic services in accordance with the standards set out in Document NAM-CATS-ATS.

# **Minimum flight altitudes**

**172.04.23** An ATS provider must determine and establish minimum flight altitudes for each air traffic services route and control area in accordance with the standards set out in Document NAM-CATS-ATS.

# Service to aircraft in case of emergency

**172.04.24** An ATS provider must establish procedures to guide air traffic services units to assist aircraft in a state of emergency in accordance with the standards set out in Document NAM-CATS-ATS.

# In-flight contingencies: strayed or unidentified aircraft

**172.04.25** An ATS provider must establish procedures in accordance with the standards set out in Document NAM-CATS-ATS, for use by air traffic services units to enable them to assist and safeguard the flight of strayed or unidentified aircraft.

# In-flight contingencies: interception of civil aircraft

**172.04.26** An ATS provider must establish procedures for use by an air traffic services unit, on becoming aware that an aircraft is being intercepted either within or outside its area of responsibility in accordance with the standards set out in Document NAM-CATS-ATS.

# Time in air traffic services

**172.04.27** An ATS provider must establish procedures to ensure that air traffic services units use Coordinated Universal Time (UTC) in accordance with the standards set out in Document NAM-CATS-ATS.

# Requirements for carriage and operation of pressure-altitude reporting transponders

**172.04.28** An ATS provider must establish procedures for the carriage and operation of pressure-altitude reporting transponders within defined portions of airspace in accordance with the standards set out in Document NAM-CATS-ATS.

# Safety management and prevention of runway incursions

**172.04.29** (1) An ATS provider must establish and maintain a safety management system acceptable to the Executive Director, for the management of safety in accordance with the standards set out in Document NAM-CATS-ATS and the requirements prescribed in Parts 140 and 170.

(2) An ATS provider must as part of its ATS safety management, put in place measures aimed at minimizing the potential for inadvertent runway incursions in accordance with the standards set out in Document NAM-CATS-ATS.

(3) An ATS provider must ensure that the measures established in accordance with subregulation (2) are integrated with the runway safety programme established by the aerodrome operator.

# **Common reference systems**

**172.04.30** (1) Subject to any standard units of measurement prescribed under Part 2, an ATS provider must use the following common reference systems in the provision of air traffic services:

- (a) World Geodetic System 1984 (WGS-84) must be used as the horizontal (geodetic) reference system for air navigation;
- (b) Mean Sea level (MSL) datum must be used as the vertical reference system for air navigation; and
- (c) the Gregorian calendar and Coordinated Universal Time (UTC) must be used as the temporal reference system for air navigation.

(2) The common reference systems referred to in subregulation (1) must be used in accordance with the standards set out in Document NAM-CATS-ATS.

# Language proficiency

172.04.31 An ATS provider must ensure that -

- (a) only the English language is used for radio telephony communication, coordination and transmission of aeronautical information; and
- (b) air traffic controllers speak and understand the English language for radiotelephony communications as specified in Document NAM-CATS-FCL 65.

# **Contingency arrangements**

**172.04.32** (1) An ATS provider must develop and publish a contingency plan or plans for implementation in the event of disruption, or potential disruption, of air traffic services and related supporting services in the airspace for which the ATS provider is responsible for the provision of such services.

(2) The contingency plans required by subregulation (1) must be developed in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.

(3) The contingency plans must be developed in accordance with the standards set out in Document NAM-CATS-ATS.

# Identification and delineation of prohibited, restricted and danger areas

**172.04.33** Prohibited areas, restricted areas and danger areas must be identified and delineated in accordance with the standards set out in Document NAM-CATS-ATS.

# Flight procedure design service

**172.04.34** (1) Flight procedure design services must be provided in accordance with requirements prescribed in Part 173.

(2) When provided, the flight procedure design service must be established in accordance with the standards set out in Document NAM-CATS-ATS.

# SUBPART 5 REQUIREMENTS FOR PROVISION OF AIR TRAFFIC CONTROL SERVICES

#### Provision of air traffic control service

172.05.1 An air traffic control service must be provided to controlled flights in accordance with the standards set out in Document NAM-CATS-ATS.

#### Air traffic control units

**172.05.2** (1) Air traffic control services provided to controlled flights, must be provided by air traffic control units described in, and in accordance with, the standards set out in Document NAM-CATS-ATS.

(2) Despite subregulation (1), the task of providing specified services on the apron such as apron management, may be assigned to an aerodrome control tower or to a separate air traffic control unit.

#### Operation of air traffic control service

**172.05.3** The requirements for the operation of air traffic control service must be in accordance with the standards set out in Document NAM-CATS-ATS.

#### Separation minima

172.05.4 An ATS provider must ensure that the separation minima used in air traffic control service complies with the standards set out in Document NAM-CATS-ATS.

#### **Responsibility for control of aircraft**

172.05.5 An ATS provider must ensure that responsibility for control of aircraft is carried out in accordance with the standards set out in Document NAM-CATS-ATS.

#### Transfer of responsibility for control

172.05.6 An ATS provider must establish procedures for the transfer of responsibility for the control of an aircraft between two air traffic control units and the coordination thereof, in accordance with the standards set out in Document NAM-CATS-ATS.

#### Air traffic control clearances

**172.05.7** An air traffic control unit must ensure that air traffic control clearances issued to aircraft are issued in accordance with the standards set out in Document NAM-CATS-ATS.

# ATS system capacity and air traffic flow management

**172.05.8** An ATS provider must establish ATS system capacity and where required, air traffic flow management in accordance with the standards set out in Document NAM-CATS-ATS.

# Control of persons and vehicles at aerodromes

**172.05.9** An ATS provider must establish procedures for use by the ATS units, for the control of persons and vehicles on the manoeuvring area of an aerodrome, including procedures for operation during periods of low visibility, in accordance with the standards set out in Document NAM-CATS-ATS.

# Provision of radar and ADS-B alert and warning systems

**172.05.10** An ATS provider must ensure that the provision of radar and automatic dependent surveillance-broadcast (ADS-B) alert and warning systems is in accordance with the standards set out in Document NAM-CATS-ATS.

# Use of surface movement radar

**172.05.11** An ATS provider may, in accordance with the standards set out in Document NAM-CATS-ATS, provide for the use of surface movement radar (SMR) to supplement visual observation of the manoeuvring area.

# SUBPART 6 REQUIREMENTS FOR FLIGHT INFORMATION SERVICE

# Application of flight information service

**172.06.1** A flight information service must be provided to all aircraft which are likely to be affected by the information in accordance with the standards set out in Document NAM-CATS-ATS.

# Scope of flight information service

**172.06.2** (1) The scope of flight information service to be provided by an air traffic services unit must include the provision of pertinent information and other information likely to affect safety of aircraft operations.

(2) The scope of flight information service to be provided by an air traffic services unit must be in accordance with the standards set out in Document NAM-CATS-ATS.

# **Operational flight information service broadcasts**

**172.06.3** An ATS provider must make arrangements for the provision of operational flight information service broadcasts in accordance with the standards set out in Document NAM-CATS-ATS.

# **VOLMET broadcasts and D-VOLMET service**

**172.06.4** An ATS provider must make arrangements for the provision of VOLMET broadcast and D-VOLMET service in accordance with the standards set out in Document NAM-CATS-ATS and the provisions of Part 174.

# SUBPART 7 REQUIREMENTS FOR ALERTING SERVICE

# **Application of alerting service**

**172.07.1** An ATS provider must make arrangements for the provision of alerting service to all aircraft in accordance with the standards set out in Document NAMCATS-ATS.

# Notification of rescue coordination centres

**172.07.2** An ATS provider must establish procedures for notifying the rescue coordination centre and other centres as appropriate, of aircraft considered to be in a state of emergency in accordance with the procedures set out in Document NAM-CATS-ATS.

# Use of communication facilities

**172.07.3** An ATS provider must establish procedures to ensure that the use of communication facilities by ATS units is in accordance with the standards set out in Document NAM-CATS-ATS.

# Plotting aircraft in state of emergency

**172.07.4** An ATS provider must, in accordance with the standards set out in Document NAM-CATS-ATS, establish procedures to ensure that air traffic service units plot the flight of an aircraft involved in an emergency and the flights of other aircraft known to be operating in the vicinity of the aircraft involved in an emergency.

# Information to operator of aircraft in emergency

**172.07.5** An ATS provider, must establish procedures to ensure that the area control centre or a flight information centre, when possible, advise the aircraft operator, when the centre determines that an aircraft is in an emergency, in accordance with the standards set out in Document NAM-CATS-ATS.

# Information to aircraft operating in vicinity of aircraft in state of emergency

**172.07.6** An ATS provider must establish procedures to ensure that ATS units, having established that an aircraft is in a state of emergency, inform other aircraft known to be operating in the vicinity of the aircraft involved, in accordance with the standards set out in Document NAM-CATS-ATS.

# Handling and reporting accidents and incidents

**172.07.7** (1) An ATS provider must report to the Executive Director any accident or incident reported to, or witnessed by, the ATS provider in accordance with the standards set out in Document NAM-CATS-ATS.

(2) An ATS provider must publish in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, the procedures to be followed by air traffic service units in handling and reporting of accident and incidents and procedures for coordination with adjacent ATS units that might be affected by the accident or incident.

# SUBPART 8 AIR TRAFFIC SERVICES REQUIREMENTS FOR COMMUNICATION

# Aeronautical mobile service (air-ground communication)

**172.08.1** An ATS provider must make arrangements for the provision of air-ground communication facilities to be used for the provision of air traffic services, including automatic recordings of air traffic control communications, in accordance with the standards set out in Document NAM-CATS-ATS.

# Aeronautical fixed service (ground-ground communication)

**172.08.2** (1) An ATS provider must make arrangements for the provision of ground to ground communications to be used for the provision of air traffic services in accordance with the standards set out in Document NAM-CATS-ATS.

- (2) The ATS provider must -
- (a) ensure that facilities used for ground to ground communications between air traffic services units and between air traffic services units and other units within the flight information region meet the requirements set out in Document NAM-CATS-ATS;
- (b) ensure that communication between its flight information centre and area control centre with other adjacent flight information centres and area control centres meet the requirements set out in Document NAM-CATS-ATS;
- (c) have in place suitable facilities to ensure automatic exchange of data; and
- (d) make arrangements for the recordings and retention of data for a period of not less than 30 days.

# Surface movement control service

**172.08.3** (1) An ATS provider must make arrangements for the provision of communication facilities for use by the aerodrome control tower for the purpose of controlling of vehicles on manoeuvring areas at a controlled aerodrome.

(2) The movement of vehicles control on the manoeuvring areas of a controlled aerodrome must be in accordance with the standards set out in Document NAM-CATS-ATS.

# Aeronautical radio navigation service

**172.08.4** An ATS provider must have arrangements in place to ensure that surveillance data from radar equipment or other surveillance systems used as an aid to air traffic services, are automatically recorded and retained in accordance with the standards set out in Document NAM-CATS-ATS.

# SUBPART 9 AIR TRAFFIC SERVICE REQUIREMENTS FOR INFORMATION

# Meteorological information

**172.09.1** (1) An ATS provider must have in place arrangements for the supply of up-to-date meteorological information to its air traffic service units, as necessary for the performance of their functions, in accordance with the standards set out in Document NAM-CATS-ATS.

(2) An ATS provider and a unit providing meteorological information to air traffic service units and to communication stations must ensure that the information provided meets the requirements of Part 174.

# Information on aerodrome conditions and operational status of associated facilities

**172.09.2** (1) An ATS provider must have in place arrangements for the provision of information on aerodrome conditions and the operational status of associated facilities to the aerodrome control towers and units providing approach control service.

(2) The provision of information required by subregulation (1) must be in accordance with the standards set out in Document NAM-CATS-ATS.

# Information on operational status of navigation services

**172.09.3** An ATS provider must have in place arrangements for air traffic service units to be kept currently informed of the operational status of radio navigation services and visual aids essential for operation of aircraft in accordance with the standards set out in Document NAM-CATS-ATS.

# **Information on RPA**

172.09.4 An ATS provider must, in accordance with the standards set out in Document NAM-CATS-ATS -

- (a) have in place arrangements for air traffic service units to be provided with information regarding the operation of remotely piloted aircraft (RPA); and
- (b) publish in its ATS manual of procedures, actions to be taken by an ATS unit upon receipt of a notification of the intended flight of a medium or heavy RPA within its area of responsibility.

# Information concerning volcanic activity

172.09.5 An ATS provider must, in accordance with the standards set out in Document NAM-CATS-ATS -

- (a) have in place arrangements for air traffic service units to be provided with information concerning volcanic activity; and
- (b) establish and publish in its ATS manual of procedures, procedures for use by ATS units when a volcanic ash cloud is reported or forecast.

# Information concerning radioactive materials and toxic chemical "clouds"

**172.09.6** An ATS provider must have in place arrangements for notifying air traffic service units of information regarding the release into the atmosphere of radioactive materials and toxic chemical clouds and for transmitting to aircraft such information, in accordance with the standards set out in Document NAM-CATS-ATS.

# SUBPART 10 SPECIAL PROCEDURES

# General

**172.10.1** (1) An ATS provider must publish in its ATS manual of procedures, for the guidance of air traffic service personnel, special procedures to enable them to manage non-standard or special situations.

(2) The special procedures must be published in accordance with the standards set out in Document NAM-CATS-ATS.

# Fuel dumping

**172.10.2** An ATS provider must publish in its ATS manual of procedures, for the guidance of ATS personnel, procedures to be followed during fuel dumping by aircraft in accordance with the standards set out in Document NAM-CATS-ATS.

# Photographic survey flights

**172.10.3** An ATS provider must publish in its ATS manual of procedures, for the guidance of air traffic service personnel, procedures for the conduct of photographic survey flights, in accordance with the standards set out in Document NAM-CATS-ATS.

# **Repetitive flight plans**

**172.10.4** An ATS provider must publish in its ATS manual of procedures, procedures for the use of repetitive flight plans in accordance with the standards set out in Document NAM-CATS-ATS.

# Letters of agreement

**172.10.5** (1) An ATS provider must establish and maintain letters of agreement (LOA) to aid in coordination between adjacent ATS units and neighbouring flight information regions.

(2) The letters of agreement referred to in subregulation (1) must be established and maintained in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination in cases of aircraft experiencing degradation of area navigation

**172.10.6** An ATS provider must establish and publish in its ATS manual, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures for coordination, in case of aircraft experiencing degradation of area navigation (RNAV).

# Coordination in cases of State aircraft without RNAV capability

172.10.7 An ATS provider must establish and publish in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, coordination procedures in case of State aircraft operating without RNAV capability.

# Coordination in provision of air traffic advisory service

**172.10.8** Where air traffic advisory services are provided, an ATS provider must publish coordination procedures in respect of such flights and provide such services in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination between ATS units and aeronautical telecommunication stations

**172.10.9** An ATS provider must establish and publish in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures for coordination between ATS units and the aeronautical telecommunication stations.

# **Radio communication failure**

**172.10.10** An ATS provider must establish and publish in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures to be followed when either an airborne or ground-based radio station experiences radio communication failure.

# Degradation of aircraft position source data

**172.10.11** An ATS provider must establish and publish its manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, contingency procedures to be followed by control positions and air traffic service units in the event of degradation of aircraft position data sources.

# **Emergency descent**

**172.10.12** An ATS provider must establish and publish its manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures to be followed by an air traffic service unit whenever an aircraft is making an emergency descent through other air traffic.

# **Other ATC contingency procedures**

**172.10.13** An ATS provider must establish and publish its manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures for the handling of other contingency situations such as emergency separation, short-term conflict alerts, airborne collision avoidance system warnings, minimum safe altitude warnings, autonomous runway incursion warnings and change of radio telephony call sign for aircraft.

# Loss of Vertical Navigation Performance Required for Reduced Vertical Separation Minimum (RVSM)

**172.10.14** An ATS provider must include in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures to be followed when an RVSM-approved aircraft experiences loss of vertical navigation performance required for operation in Reduced Vertical Separation Minimum (RVSM) airspace.

# Air traffic service messages

**172.10.15** An ATS provider must establish and publish in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures and information regarding transmission of air traffic service messages.

# Responsibility in regard to military traffic

**172.10.16** An ATS provider must publish in its ATS manual of procedures, and in accordance with the standards set out in Document NAM-CATS-ATS, procedures regarding responsibility for control of military traffic within its area of jurisdiction.

# Air traffic incident reports

**172.10.17** An ATS provider must publish in its ATS manual of procedures, the procedures for reporting of air traffic incidents related to the provision of air traffic services in accordance with the standards set out in Document NAM-CATS-ATS.

# Strategic lateral offset procedures

**172.10.18** An ATS provider must publish in its ATS manual of procedures, the strategic lateral offset (SLOP) procedures for implementation by air traffic services units in accordance with the standards set out in Document NAM-CATS-ATS.

# Notification of suspected communicable diseases or public health risk aboard aircraft

**172.10.19** An ATS provider must publish in its ATS manual of procedures, procedures for notification of suspected communicable diseases or other public health emergencies aboard an aircraft in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination in respect of provision of ATC service

**172.10.20** The coordination and transfer of control of a flight between successive ATS units and control sectors must be in accordance with the standards set out in Document NAM-CATS-ATS.

# Coordination in respect of provision of flight information service and alerting service

**172.10.21** An ATS provider must publish in its manual of procedures and in accordance with requirements specified in Document NAM-CATS-ATS, procedures for coordination in respect of the provision of flight information and alerting services.

# Procedures for ATS units when volcanic ash cloud is reported or forecast

**172.10.22** An ATS provider must publish in its manual of procedures and in accordance with the requirements specified in Document NAM-CATS-ATS, standardised procedures to be followed by ATS units when a volcanic ash cloud is reported or forecast within the airspace for which the ATS unit is responsible.

# Responsibility in regard to unmanned free balloons

**172.10.23** An ATS provider must publish in its manual of procedure and in accordance with requirements specified in Document NAM-CATS-ATS, standardised procedures for the guidance of ATS units on responsibility regarding operation of unmanned free balloons within their areas.

# SUBPART 11 ADMINISTRATIVE PROCEDURES

# **Opening and closing of control positions**

172.11.1 An ATS provider must establish procedures and instructions for opening and closing of control positions as specified in Document NAM-CATS-ATS.

# Fire prevention and facility evacuation

**172.11.2** An ATS provider must maintain a fire prevention plan in accordance with the standards set out in Document NAM-CATS-ATS.

# ATS unit forms, logs, libraries and directives

172.11.3 An ATS provider must -

- (a) provide and maintain a comprehensive list, including copies, of relevant forms, unit logs, unit libraries and directives in accordance with the requirements set out in Document NAM-CATS-ATS; and
- (b) establish procedures in its manual of procedures on the use and maintenance of the air traffic service unit forms, logs, libraries and directives in accordance with the requirements set out in Document NAM-CATS-ATS.".

# **Insertion of Part 173 in Regulations**

9. The Regulations are amended by the insertion after Part 172 of the following Part:

# "PART 173 AIR NAVIGATION SERVICES: FLIGHT PROCEDURE DESIGN SERVICES LIST OF REGULATIONS

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# SUBPART 1 GENERAL

# Definitions for this Part

**173.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-FPD.

(2) Despite subregulation (1), in this Part, unless the context otherwise indicates -

"design work", in relation to a flight procedure, means any of the following work -

- (a) designing the procedure or a part of the procedure;
- (b) verifying, maintaining, reviewing, amending or adapting the procedure;
- (c) supervising a person carrying on any work mentioned in paragraph (a) or (b);

"flight procedure design (FPD) approval" means an authorisation that -

- (a) is granted by the Executive Director to a person under this Part; and
- (b) certifies that the person is approved to carry out design work on a flight procedure of a type covered by the approval subject to any conditions set out in the approval; and

"flight procedure design (FPD) organisation" means an organisation or entity to whom a flight procedure design approval has been granted in accordance with this Part and whose approval authorises the design, verification, validation, and maintenance of the particular type of flight procedure.

# Applicability

**173.01.2** (1) This Part -

- (a) prescribes the regulations and procedures governing the development, validation, approval, registration, publication and maintenance of flight procedures used at aerodromes;
- (b) applies to -

- (i) the design, maintenance, revision, amendment and adaptation of flight procedures; and
- (ii) the approval and operation of organisations conducting flight procedure design, maintenance, revision, amendment or adaptation; and
- (c) sets out certain administrative rules relating to the Executive Director in the administration of this Part.
- (2) This Part does not apply to -
- (a) the design of flight procedures for use by aircraft in circumstances where one or more engines of the aircraft have become inoperative while on an IFR flight;
- (b) a person that carries out flight procedure design on procedures for use by aircraft in circumstances where one or more engines of the aircraft have become inoperative while on an IFR flight;
- (c) a person who is providing flight procedure design services to military aircraft within designated military airspaces in the course of their duties, for the Namibian Defence Force; and
- (d) any flight procedure design services provided to military aircraft within designated military airspaces for the Namibian Defence Force.

# SUBPART 2 APPROVAL TO PROVIDE FLIGHT PROCEDURE DESIGN SERVICES

# **Requirement for approval**

**173.02.1** (1) A person may not design, maintain, review, amend or adapt flight procedures that are intended for use by civil aircraft operating within the territorial limits of Namibia, except under the authority of, and in accordance with the provisions of, a flight procedure design approval with the appropriate rating issued under this Part and in accordance with the requirements prescribed in Part 170.

- (2) The Executive Director may -
- (a) as part of the organisational functions of the Authority, provide a flight procedure design service;
- (b) agree with one or more States to provide a joint flight procedure design service;
- (c) delegate the provision of the service to an external agency or agencies; or
- (d) approve an agency to a provide flight procedure design service.

(3) In all cases mentioned in subregulation (2), the Executive Director remains responsible for all flight procedures for aerodromes and airspaces under the authority of Namibia.

(4) Flight procedures must be designed in accordance with the approved design criteria described in regulation 173.04.9.

(5) A flight procedure design organisation intending to design an instrument flight procedure for aerodromes or airspace under the authority of Namibia, must meet the requirements prescribed in this Part.

(7) A flight procedure design organisation must maintain and conduct periodic review of flight procedures for aerodromes and airspace under the authority of the Namibia and such reviews must be conducted at intervals of periods not exceeding five years.

# Application for flight procedure design approval or amendment thereof

**173.02.2** (1) An application for a flight procedure design approval, or an amendment thereof, must be -

- (a) made to the Executive Director in the appropriate form set out in Document NAM-CATS-FPD; and
- (b) accompanied by -
  - (i) the manual of procedures referred to in regulation 173.03.1;
  - (ii) a written statement specifying the type or each type of flight procedure proposed to be covered by the flight procedure design approval;
  - (iii) a written statement setting out the name, qualifications and relevant experience of the individual who is proposed to be the chief designer for the applicant's organisation;
  - (iv) a written statement setting out the qualifications and relevant experience of any other member of the applicant's personnel whose duties would, if the approval were granted to the applicant, include carrying on design work under the approval; and
  - (v) the appropriate fee as prescribed in Part 187.

(2) Where an applicant was previously issued with a flight procedure design approval, and the approval was revoked, the applicant must include with the application any information to prove that the applicant would be in a position to comply with all requirements pertaining to the design of flight procedures of the rating or ratings concerned.

(3) The Executive Director may require demonstrations of procedures or equipment in relation to a procedure design approval.

# Safety and regulatory compliance inspections and audits

**173.02.3** (1) In addition to permitting the safety and regulatory compliance inspections and audits in terms of regulation 170.01.3, a flight procedure design organisation must permit an authorised officer, inspector or authorised person to -

- (a) observe the practices and procedures of the organisation in performing flight procedure design; and
- (b) inspect and test any systems and equipment used for, or in relation to, flight procedure design.

# Facilities, equipment and resource requirements

**173.02.4** (1) A flight procedure design organisation must satisfy the Executive Director that it has facilities and equipment necessary to perform adequately the approved scope of flight procedure design, including -

- (a) equipment that is appropriate for the design, verification, validation, and maintenance of the types of flight procedure to be covered in its approval, including flight procedures design software and other software licensed to the flight procedures design organisation;
- (b) access to all necessary data including, but not limited to -
  - (i) accurate and current databases or charts detailing terrain and obstacle information;
  - (ii) accurate and current navigation aid coordinate data; and
  - (iii) accurate and current aerodrome survey data;
- (c) ready access to copies of relevant documentation comprising technical standards, practices, and instructions, and any other documentation that may be necessary for the design, design verification, validation, and maintenance of the types of flight procedures specified in its manual of procedures.
- (2) A flight procedure designer must establish a procedure for ensuring that -
- (a) personnel have access to the data referred to in subregulation (1)(b) for the types of flight procedure specified in its manual of procedures; and
- (b) the data referred to in subregulation (1)(b) is current, traceable, and meets the required level of verifiable accuracy for the design, verification, validation and maintenance of instrument flight procedures specified in its manual of procedures.

(3) The flight procedure organisation must, if an aeronautical database and aeronautical data is utilised for designing flight procedures, have, and put into effect, procedures to ensure the integrity of the database and the data.

# Issue of flight procedure design approval

**173.02.5** (1) The Executive Director may issue a flight procedure design approval, if the Executive Director is satisfied that -

- (a) the applicant meets the requirements prescribed in Part 170 and in this Part;
- (b) the applicant's personnel required by this Part are competent to perform their respective duties;
- (c) the applicant's senior personnel have not held a senior position in an organisation whose approval was revoked by the Executive Director; and
- (d) the granting of the approval is not contrary to the interests of aviation safety.

(2) The flight procedures design approval referred to in subregulation (1) is issued in the appropriate form, and contains the information, set out in Document NAM-CATS-FPD.

(3) The Executive Director may, in accordance with section 46 of the Act and Part 3, approve a variation to the requirements of this Part or of Document NAM-CATS-FPD where a flight procedure certified organisation can demonstrate an equivalent outcome and at least an equivalent level of safety.

## Imposition of conditions on approval

**173.02.6** The Executive Director may impose conditions on any flight procedure design approval, including a condition that restricts -

- (a) the kind of flight procedures that can be designed;
- (b) the equipment used to provide the design service; or
- (c) the method by which procedures are validated or publicised.

## Renewal of flight procedure design approval

**173.02.7** (1) An application for the renewal of a flight procedure design approval,

must be -

- (a) made to the Executive Director on the appropriate form set out in Document NAM-CATS-FPD; and
- (b) accompanied by -
  - (i) the manual of procedures referred to in 173.03.1; and
  - (ii) the appropriate fee as prescribed in Part 187.

(2) The holder of a flight procedure design approval must, if it wishes to renew the approval, at least 90 days immediately preceding the date on which a flight procedure design approval expires, apply to the Executive Director for the renewal of such approval.

## **Duplicate approval**

173.02.8(1)An application for a duplicate approval as contemplated in Part 170must be -

- (a) made in the appropriate form set out in Document NAM-CATS-FPD; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(2) A duplicate of a flight procedure design approval is issued on the appropriate form set out in Document NAM-CATS-FPD.

## Privileges of flight procedure design approval holder

**173.02.9** (1) A flight procedure design approval issued under this Part authorises the holder of the approval to -

- (a) design, validate, and maintain flight procedures for use within Namibia; and
- (b) make available for publication and operational use by aircraft, aeronautical information relating to flight procedures that have been validated and approved.

(2) A flight procedure design approval is limited to the type of flight procedure design listed in the approval.

#### SUBPART 3 REQUIREMENTS TO BE COMPLIED WITH BY APPROVED FLIGHT PROCEDURE DESIGN ORGANISATIONS

## **Manual of procedures**

**173.03.1** (1) A flight procedure design organisation must, at all times, maintain a manual of procedures that complies with the requirements of Part 170.

(2) The manual of procedures for a flight procedure design organisation must in addition to the requirements prescribed in Part 170, include the -

- (a) specific standards set out in Document NAM-CATS-FPD;
- (b) means of meeting equipment requirements, accessing relevant and current data and accessing copies of relevant documentation as required under this Part;
- (c) means of meeting the requirements regarding flight procedures not requiring flight validation; and
- (d) procedures required to be established under this Part.

## Flight procedure design organisation

**173.03.2** (1) A flight procedure design organisation must, at all times, maintain an appropriate organisation with a sound and effective management structure to enable it to provide the flight procedure design services covered by its approval.

- (2) The flight procedure design organisation must -
- (a) maintain an appropriate instrument design office to enable the instrument flight procedure designer to carry on design work in flight procedures in the design office;
- (b) ensure that the quality and safety of the flight procedure design products are assured through the review, verification, coordination and validation at appropriate points in the process;
- (c) ensure that the designs of the flight procedure are in accordance with -
  - (i) applicable standards set out or referred to in the current version of the ICAO Procedure for Air Navigation Procedures Flight Operations(Doc 8168); and
  - (ii) applicable standards as set out in this Part;
- (d) make provision for a person trained in flight procedure designing to check and verify independently the plans of each flight procedure designed; and
- (e) ensure only the latest version of the organisation's procedures design software is used.

## Personnel and qualification requirements

173.03.3 (1) A flight procedure design organisation must engage, employ or contract -

- (a) a person identified as the senior accountable manager (chief flight procedure designer) of the organisation concerned, to whom contractual authority has been granted to ensure that -
  - (i) all activities undertaken by the organisation are carried out in accordance with the applicable requirements prescribed in this Part; and
  - (ii) any flight procedure design covered by the approval is performed as prescribed in this Part;
- (b) a senior person responsible to the chief flight procedure designer to ensure that the organisation complies with its approved manual of procedures; and
- (c) sufficient qualified and competent flight procedure designers to plan, design, verify and maintain the flight procedures covered by the approval.

(2) The chief flight procedure designer, senior personnel and other personnel involved in flight procedure design must meet the minimum qualification requirements as set out in Document NAM-CATS-FPD.

(3) A flight procedure design organisation may not engage, employ or contract a person to design flight procedures for use in a designated airspace or at aerodromes within Namibia unless that person has completed approved training in the construction of visual and instrument flight procedures and has been approved by the Executive Director to do so.

- (4) A flight procedure design organisation must -
- (a) establish a procedure for initially assessing, and for maintaining the competence of those personnel involved in planning, design, verification and maintenance of the flight procedures;
- (b) develop job descriptions for its flight procedure design technical staff;
- (c) ensure that the personnel referred to in paragraph (a) meet the minimum qualifications set out in Document NAM-CATS-FPD;
- (d) carry out initial, periodic and recurrent training of the flight procedure design personnel in accordance with the standards set out in Document NAM-CATS-FPD; and
- (e) ensure that newly employed or engaged flight procedure design personnel undergo, supervised on-the-job training before undertaking unsupervised flight procedure design tasks.

## Obligations of approval holder in designing flight procedures

**173.03.4** (1) A flight procedure design organisation must ensure that flight procedures are designed to the appropriate standard and in accordance with this Part.

(2) In performing flight procedure design, a flight procedure design organisation must -

- (a) design each flight procedure in accordance with the standards set out in Document NAM-CATS-FPD;
- (b) verify each designed flight procedure as prescribed in this Part;
- (c) submit flight procedures designed and verified as referred to in paragraphs (a) and
  (b) to the Executive Director for ground and flight validation as prescribed in this Part;
- (d) adhere to the defined approval process; and
- (e) ensure that flight procedures submitted as required in paragraph (c) are accompanied by the appropriate fee as prescribed in Part 187.

(3) A flight procedure design organisation must maintain each flight procedure periodically at intervals specified in regulation 173.02.1(7).

(4) A flight procedure design organisation must ensure that a flight procedure covered by its approval does not make use of a ground-based radio-navigation aid other than one that is operated and approved in terms of Part 171.

(5) If the flight procedure design organisation intends to cease to perform flight procedure design of a particular type, it must notify the Executive Director for an amendment of the approval in accordance with the requirements of regulation 170.02.6.

(6) If the flight procedure design organisation ceases to be responsible for the maintenance of a flight procedure, it must give written notice to that effect to the Executive Director as soon as possible after ceasing to perform the flight procedure design concerned.

## Transferability of maintenance of flight procedures

**173.03.5** (1) A flight procedure design organisation may transfer its responsibility for maintaining a flight procedure to another organisation whose flight procedure design approval authorises that organisation to design flight procedures of the same rating as the flight procedure concerned.

(2) If another organisation referred to in subregulation (1) accepts responsibility for the maintenance of a flight procedure under this Part, the organisation concerned must -

- (a) give written notice to the transferor to that effect;
- (b) give written notice of the transfer to the Executive Director within 14 days after the transfer; and
- (c) include in the notices referred to in paragraphs (a) and (b), the date on which the transfer takes effect.

(3) If the flight procedure design organisation transfers its responsibility for maintaining a flight procedure, it must give written notice of the transfer to the Executive Director within 14 days after the transfer.

## Training and checking programme

**173.03.6** (1) A flight procedure design organisation must establish and maintain a training and checking programme for all personnel referred to in this Subpart that will ensure such personnel are adequately trained and qualified to perform their assigned duties.

(2) The Executive Director must approve the training programme referred to in subregulation (1), if the training and checking programme meets the requirements of this regulation and of Part 170.

- (3) A flight procedure design organisation must ensure that -
- (a) prior to assignment to duty, each person required to receive training in accordance with this Subpart, must, whether employed on a full or part time basis, receive such training as appropriate to his or her duties; and
- (b) the training facilities, equipment and personnel are acceptable to the Executive Director and, in the case of training facility has been approved by the Executive Director in accordance with the standards set out in Document NAM-CATS-FPD.

(4) The training and checking programme referred to in subregulation (1) must include a system for maintaining of training records for flight procedure design personnel.

(5) A flight procedure design organisation must develop and maintain the training and checking programme referred to in subregulation (1).

(6) A flight procedure design organisation must submit for the approval of the Executive Director its training and checking programme and any amendments to the programme.

(7) A flight procedure design organisation must provide training to its personnel that includes at least the following training components:

- (a) flight procedure design training on an initial basis pertinent to the design type listed in the approval; and
- (b) recurrent flight procedure training.

(8) Only approved training must be considered for the initial and recurrent training referred to in subregulation (7).

(9) The training required by subregulation (7)(b) must be provided on a recurrent basis and at specified intervals not exceeding three years, or any period as may be determined by the Executive Director.

#### Quality management system

**173.03.7** (1) A flight procedure design organisation must have, and put into effect, a quality assurance and quality management system that includes the policies, procedures, and practices necessary for managing design work on flight procedures under its approval.

(2) The quality assurance and management system must be in accordance with the requirements of Part 170 and the standards set out in Document NAM-CATS-FPD.

(3) The quality assurance and quality management system may be integrated with the safety management system required under Part 170.

#### Management of records

**173.03.8** (1) A flight procedure design organisation must establish procedures for the control of documentation including identification, collection, indexing, storage, safekeeping, accessibility, maintenance and disposal of records in accordance with requirements prescribed in Part 170.

(2) A flight procedure design organisation must establish a procedure for the management of records that are required for the organisation's functions relating to the design, certification and maintenance of flight procedures.

(3) A flight procedure design organisation must establish procedures to identify, collect, index, store and maintain all records which may be necessary -

(a) for the specified flight procedure design conducted by the organisation; and

(b) to determine compliance with the appropriate requirements prescribed in this Part.

(4) The procedure referred to in subregulation (2) must provide for the following to be recorded for every flight procedure that is approved and maintained:

- (a) details to be published in the AIP for the flight procedure;
- (b) details of the flight procedure design carried out, including but not limited to design verification, amendment, validation, justification for not validating, and certification activities;
- (c) details of the publication and checking activities;
- (d) details of any actions taken regarding errors and non-conformances in the flight procedure; and
- (e) details of every maintenance review and validation carried out, in accordance with this Part.

(5) The procedure required by subregulation (2) must also provide that records maintained must -

- (a) include details of the qualifications, experience, training, assessments, and authorisations, if applicable, for personnel required under this Part;
- (b) be legible, accurate, permanent, and retrievable in a legible format; and
- (c) be retained for at least five years after the associated flight procedure is withdrawn from use.

(6) The flight procedure design organisation must comply with any additional standards for the management of records set out in Document NAM-CATS-FPD.

#### Safety management system

**173.03.9** A flight procedure design organisation must establish, implement, and maintain a system for safety management in accordance with Parts 140 and 170 and the standards set out in Document NAM-CATS-FPD.

## SUBPART 4 REQUIREMENTS FOR DESIGN OF FLIGHT PROCEDURES

#### **General requirements**

**173.04.1** (1) A flight procedure design organisation must develop flight procedures to be used by aircraft operating in the designated airspace and aerodromes covered by its approval.

(2) A flight procedure design organisation providing a flight procedure service must establish procedures for ensuring that every flight procedure is -

- (a) designed or amended using methods which ensure that the procedure meets the applicable requirements of this Part;
- (b) independently verified before validation where applicable, by a qualified person who is not the person directly responsible for the design;
- (c) validated by a qualified person who is not the person directly responsible for the design to ensure that -
  - (i) the flight procedure allows aircraft using the procedure to manoeuvre consistently within safe operating practices and pilot workloads for the categories of aircraft that the procedure is intended for;
  - (ii) the flight procedure provides azimuth and distance information, and vertical guidance information for a precision approach, for the operation of aircraft to ensure that an aircraft using the procedure remains clear of obstacles; and
  - (iii) visual guidance systems and cues for the runway are appropriate for the flight procedure and are not confused by lighting, laser sky displays or any other visual distraction.

(3) A flight procedure design organisation must comply with the requirements of regulation 173.04.2, and the standards set out in Document NAM-CATS-FPD.

## Standards for design of flight procedures

**173.04.2** (1) A flight procedure design organisation designing an instrument flight procedure under the organisation's procedure design approval must ensure that the procedure is designed in accordance with -

- (a) the design requirements set out in the current version of the ICAO PANS-OPS (Doc 8168);
- (b) the design requirements set out or referred to in the current version of the ICAO Required Navigation Performance Authorisation Required Procedure Design Manual (Doc 9905);
- (c) the quality assurance, training, and validation and associated requirements set out in the current version of the ICAO Quality Assurance Manual for Flight Procedure Design (Doc 9906) – Volume 1 to Volume 6; and
- (d) any applicable standards and requirements set out in Document NAM-CATS-FPD.

(2) A flight procedure design organisation must establish procedures for ensuring that the processes of design, maintenance, or transfer of data of a flight procedure comply with the standards specified or referred to in Document NAM-CATS-FPD.

(3) A flight procedure design organisation may use alternative standards equivalent to the standards specified in this Part provided that the standards are acceptable to the Executive Director.

## Verification of flight procedures

**173.04.3** (1) A flight procedure design organisation must establish a procedure for verifying every flight procedure that it proposes to design, make available for operational use, and publish the flight procedure in the AIP.

- (2) The procedure required by subregulation (1) must include -
- (a) details of the checks to be carried out by a senior person, who is authorised to verify and certify the particular type of flight procedure, to ensure that the flight procedure meets the applicable requirements and standards prescribed by this Part; and
- (b) the means for providing the Executive Director with the information required under this Part for approval of the procedure and for the entry of the flight procedure into the register.

(3) A person who is authorised to verify and certify a flight procedure may not verify or certify a flight procedure that the person has designed.

(4) In this Part, a reference to verifying a flight procedure is a reference to the process of checking the procedure, including all data, computations and drawings for the procedure, in accordance with any applicable standards set out in this Part.

## Procedures for validation of flight procedures

**173.04.4** (1) A flight procedure design organisation must ensure that the designed flight procedures undergo the validation process as applicable in accordance with the standards set out in Document NAM-CATS-FPD and subject to any conditions as are specified in the approval.

(2) Where a flight procedure design organisation has been approved to conduct validation of flight procedures, it must ensure that each flight procedure designed under its approval is validated in accordance with this Part and applicable standards set out in Document NAM-CATS-FPD.

(3) Where a flight procedure design organisation has not been approved to conduct validation of flight procedures, the organisation must ensure that each flight procedure it designs is validated by an approved flight procedure design entity prior to being submitted to the Executive Director for approval.

(4) A flight procedure design organisation that has been approved to conduct validation of flight procedures must establish procedures for conducting the validation of flight procedures as required under this Part.

(5) The procedures established in accordance with subregulation (4) must include the use of equipment that -

- (a) has the precision, and accuracy traceable to appropriate standards, that are necessary for the validation being performed;
- (b) has known measurement uncertainties including, but not limited to, the software, firmware and crosswind uncertainties;
- (c) where flight validation is required, records the actual flight path of the validation aircraft; and

(d) is checked before being released for use, and at intervals not exceeding the calibration intervals recommended by the manufacturer, to establish that the system is capable of verifying the integrity of the flight procedure.

(6) A flight procedure design organisation must ensure that all flight procedures that it designs undergo ground validation and flight validation.

(7) Despite the requirement of subregulation (6), the flight validation of a flight procedure design may be excluded where the flight procedure design organisation can verify through ground validation, the accuracy and completeness of all obstacle and navigation data considered in the procedure design, and any other factors normally considered in the flight validation.

(8) The process to be used for ground and flight validation must be as described in Document NAM-CATS-FPD.

(9) Conditions under which flight validation is required must be as set out in Document NAM-CATS-FPD.

#### Process for approval of flight procedures

**173.04.5** (1) Each flight procedure intended for use by aircraft operating within the territorial limits of Namibia must be approved by the Executive Director.

(2) The procedures for design submission and approval must be as set out in Document NAM-CATS-FPD.

(3) Before approving a flight procedure the Executive Director must be satisfied that the flight procedure -

- (a) has been developed and validated in compliance with the applicable requirements of this Part, and any standards set out in Document NAM-CATS-FPD;
- (b) has been developed and validated by a flight procedure design organisation approved by, and in compliance with regulations and standards of, another State acceptable to the Executive Director;
- (c) is safe for use in aviation generally; and
- (d) will be maintained by an approved flight procedures organisation.
- (4) The Executive Director must indicate approval of each flight procedure in writing.

(5) An approval granted under this Part, is valid for a maximum period of two years unless it is suspended or revoked in accordance with Part 170.

(6) An approval granted under this Part is not transferable.

#### Entry of flight procedures into register

**173.04.6** (1) The Executive Director must enter or cause to be entered each flight procedure intended for use by aircraft operating under IFR within the territorial limits of Namibia into the register referred to in regulation 71.10.1.

(2) For the purpose of subregulation (1), the following information is required by the Executive Director for every entry of a flight procedure into the register:

- (a) the name or other appropriate identifier that is acceptable to the Executive Director to uniquely identify the flight procedure;
- (b) aeronautical data that is acceptable to the Executive Director to define and describe the flight procedure;
- (c) the date that the flight procedure is intended to come into effect;
- (d) a statement signed by the senior person referred to in regulation 173.04.3(2)(a), certifying that the flight procedure meets the applicable standards and requirements prescribed by this Part; and
- (e) a statement signed by a senior person referred to in paragraph (d), of the appropriate flight procedure organisation certifying that the flight procedure is to be maintained in accordance with the organisation's procedures required by this Part.

## Publication of flight procedures

- 173.04.7 (1) A flight procedure design organisation must give -
- (a) each flight procedure designed under its approval ; and
- (b) a certificate by the flight procedure design organisation's chief designer to the effect that the procedure is designed and validated in accordance with any applicable requirements prescribed in this Part and the standards set out in Document NAM-CATS-FPD,

to the aeronautical information service (AIS) for publication of the flight procedure in the AIP.

- (2) A flight procedure design organisation must establish procedures to ensure that -
- (a) a flight procedure is not published or made available for operational use, unless it has been validated and approved by the Executive Director;
- (b) the initial publication of, or any change to, a flight procedure has been accurately published;
- (c) the date that the flight procedure is intended to come into effect is clearly stated;
- (d) the flight procedures designs or charts, are provided to the Aeronautical Information Service (AIS) provider for publication in the AIP; and
- (e) the designs or charts published in the AIP are produced in accordance with the standards set out in Document NAM-CATS-FPD.
- (3) The procedure required in subregulation (2) must include details of the means -
- (a) for coordinating with the aeronautical information service provider and the publishing of the flight procedure in the AIP; and
- (b) to check that the initial publication of, or any change to, a flight procedure published under subregulation (1) has been accurately published in the AIP.
- (4) A flight procedure design organisation must -

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- (a) keep the aeronautical charts included in the AIP up-to-date by means of replacement sheets, where necessary; and
- (b) clearly indicate in the revised charts, any significant amendments or revisions in the flight procedure.

(5) Where required, coding of flight procedures will be conducted in accordance with the standards set out in NAM-CATS-FPD.

#### Maintenance of flight procedures

**173.04.8** (1) A flight procedure design organisation must maintain a flight procedure in accordance with the schedule set out in Document NAM-CATS-FPD.

(2) A flight procedure design organisation providing maintenance of a flight procedure must record, investigate, correct, and report, any identified error, and any identified non-conformance or suspected non-conformance in accordance with the standards set out in Document NAM-CATS-FPD.

## Design criteria for flight procedures

**173.04.9** (1) A flight procedure design organisation must design, validate and publish every flight procedure in accordance with the requirements of this Part and in accordance with the appropriate design processes, standards, guidelines, and aeronautical data quality requirements contained in the following materials:

- (a) the current versions of ICAO Documents -
  - Procedures for Air Navigation Services Aircraft Operations Volume I Flight Procedures and Volume II, Construction of Visual and Instrument Flight Procedures (Doc 8168);
  - (ii) Aeronautical Chart Manual (Doc 8697);
  - (iii) Manual of All-Weather Operations (Doc 9365);
  - (iv) Performance-Based Navigation Manual Volume I Concept and Implementation Guidance and Volume II Implementing RNAV and RNP(Doc 9613);
  - (v) Guidelines for Electronic Terrain, Obstacle and Aerodrome Mapping Information (Doc 9881);
  - Manual on the Use of the Collision Risk Model (CRM) for ILS operations (Doc 9274 -.AN/904);
  - (vii) Instrument Flight Procedure Construction Manual (Doc 9368 AN/911);
  - (viii) Quality Assurance Manual for Flight Procedure Design (Doc 9906 AN/472);
  - (ix) World Geodetic System 1984 (WGS-84) Manual(Doc 9674 AN/946);
  - Manual on Airspace Planning Methodology for the Determination of Separation Minima (Doc 9689);

- (xi) Global Navigation Satellite System (GNSS) Manual (Doc 9849);
- (b) the applicable requirements of Parts 91, 139, 172 and 175; and
- (c) any other guideline or standard that is applicable to a particular type of flight procedure.

(2) The design criteria for flight procedures must be in accordance with the criteria described in ICAO Doc 8168 referred to in subregulation (1)(a)(i) for the development of -

- (a) standard instrument departure (SID) and standard instrument arrival(STAR) procedures;
- (b) approach procedures;
- (c) circling procedures;
- (d) en-route procedures;
- (e) holding procedures;
- (f) noise abatement procedures;
- (g) altimeter setting procedures; and
- (h) procedures for simultaneous operations on parallel runways.

(3) A flight procedure design organisation for the development of flight procedures, including the procedures listed in subregulation (2), must submit to the Executive Director the procedures for publication in the AIP in the format prescribed in Part 175.

- (4) For purposes of subregulations (1), (2) and (3), the applicable -
- (a) design processes, standards, guidelines, to be used must meet the criteria set out in Document NAM-CATS-FPD; and
- (b) aeronautical data quality and integrity requirements, must meet the criteria prescribed in Part 175.
- (5) The design of a procedure must -
- (a) be coordinated with all appropriate air traffic service providers;
- (b) be compatible with any air traffic service and associated procedure that is provided within the area or areas of airspace where the instrument flight procedure is intended to be established;
- (c) comply with -
  - (i) noise abatement and environmental requirements described in ICAO Document 9888: Noise Abatement Procedures; and
  - (ii) any other legislation restricting aircraft operations;
- (d) not impact on any adjacent airspace that may be affected by the procedure, unless appropriate coordination has been undertaken during the design phase; and

- (e) take into account the effect that the proposed flight procedure may have on any other flight procedure established in the same airspace.
- (6) A flight procedure may not be designed using a ground based ATEL facility unless

the -

- (a) ATEL facility is installed and operated under the authority of an aeronautical telecommunication service provider certificate issued under Part 171; and
- (b) ATEL service provider agrees in writing that the ATEL facility can be used for the intended flight procedure.

(7) A flight procedure design organisation must ensure that the accuracy and integrity of data is maintained throughout the data process in accordance with the standards prescribed in Part 175.

(8) A flight procedure may not be designed for an aerodrome or heliport, unless the operator of the aerodrome or heliport agrees in writing that the aerodrome or heliport may be used for IFR and VFR operations using the intended flight procedure.

#### **Information acquisition**

**173.04.10** (1) A flight procedure design organisation must ensure that the survey and, the collection of data or information and subsequent flight procedure design activities and processes are controlled and monitored by a person or persons trained in flight procedure design.

(2) In the obstacle survey for procedure design, the flight procedure design organisation must consider that -

- (a) all obstacles be accounted for, and items, such as trees and heights of tall buildings must be accounted for either by physical examination of the site or by addition of a suitable margin above terrain contours; and
- (b) the accuracy of the vertical and horizontal data obtained may be adjusted by adding an amount equal to the specified survey error to the height of all measured obstructions and by making a corresponding adjustment for specified horizontal error.

(3) The procedure design information must be coordinated with all relevant stakeholders, and as input for the procedure design process the following aspects need to be assessed:

- (a) airport, navigation aid, obstacle, terrain coordinate and elevation data, based on verified surveys;
- (b) airspace requirements;
- (c) user requirements the needs of air traffic service provider and operators who will use this procedure;
- (d) airport infrastructure such as runway classification, lighting, communications, runway markings, and availability of local altimeter setting;
- (e) environmental considerations; and
- (f) any other potential issue associated with the procedure.

- (4) For the purpose of this regulation, "stakeholder" includes -
- (a) the Authority;
- (b) air navigation services providers;
- (c) air traffic service providers;
- (d) aircraft operators;
- (e) aerodrome and airport operators;
- (f) aviation associations;
- (g) environmental authorities responsible for administering or regulation of matters relating to the environment;
- (h) flight procedure design organisations; and
- (i) any other persons or entities determined to be stakeholders by the Executive Director for the purpose of this regulation.

#### Procedure design automation

**173.04.11** (1) A flight procedure design organisation must ensure that the software packages used in the design of procedures has been validated.

(2) A flight procedure design organisation must ensure that a description of the procedures to be used to ensure that all equipment, including software is operated in accordance with the manufacturer's operating instructions and manuals, is readily available to the flight procedure designer.

(3) The flight procedure design organisation must ensure that the provisions of ICAO Doc 9906 referred to in regulation 173.04.9(1)(a)(viii) are adhered to in terms of software validation and use.

#### General criteria and procedures for establishment of aerodrome operating minima

**173.04.12** A flight procedure design organisation must comply with the General Criteria and Procedures for the establishment of the Aerodrome Operating Minima specified in Document NAM-CATS-FPD.

#### SUBPART 5 GENERAL OPERATING REQUIREMENTS

#### **Continued compliance**

- 173.05.1 (1) A flight procedure design organisation must -
- (a) hold at least one complete and current copy of its manual of procedures at the organisation's principal location;
- (b) comply with every procedure and standard detailed in its manual of procedures;
- (c) make each applicable part of the exposition available to personnel who require the applicable part to carry out their duties;

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- (d) continue to meet the standards and comply with the requirements of this Part and the standards set out in NAM-CATS-FPD and the requirements of Part 170; and
- (e) notify the Executive Director of any change in its postal address, address for service, telephone number, email address or facsimile number within 14 days of the change.
- (2) The flight procedure design organisation must -
- (a) ensure that it's manual of procedures is amended in accordance with the requirements of Part 170 so that it remains a current description of the holder's organisation;
- (b) ensure that any amendment made to its exposition meets the applicable requirements of Part 170;
- (c) comply with the amendment procedures contained in its manual of procedures;
- (d) forward to the Executive Director for retention a copy of each amendment that the organisation makes to its exposition as soon as possible after the amendment is incorporated into its manual of procedures; and
- (e) amend its manual of procedures as the Executive Director may consider necessary in the interests of aviation safety.

(3) Before a flight procedure design organisation changes any of the following, prior written approval by the Executive Director is required -

- (a) the person identified as the senior accountable manager in accordance with Part 170;
- (b) the title or name of any senior person specified in the manual of procedures;
- (c) the types of flight procedure specified on the organisation's approval; and
- (d) the system for safety management, if the change is a material change.

(4) The Executive Director may impose conditions under which the flight procedure design organisation must operate during or following any of the changes specified in subregulation (3).

(5) The flight procedure design organisation must comply with any condition imposed by the Executive Director under subregulation (4).

(6) Where any of the changes under subregulation (3) requires an amendment to the flight procedure approval, the flight procedure design organisation must submit the approval to the Executive Director for endorsement of the change as soon as possible.

#### Cessation of maintenance of flight procedure service

**173.05.2** Where a flight procedure design organisation that has been approved by the Executive Director for the maintenance of flight procedure design wishes to discontinue the maintenance of a flight procedure as required under this Part, the organisation must notify the Executive Director in writing of the intention to discontinue the maintenance at least 90 days before the expiry of the procedure's scheduled maintenance period.

## **Design submission template**

**173.05.3** A flight procedure design organisation must, when submitting a flight procedure, do so using a template set out in Document NAM-CATS-FPD.".

#### Substitution of Parts 174 and 175 of Regulations

**10.** The Regulations are amended by the substitution for Parts 174 and 175 of the following Parts:

#### **"PART 174**

# AIR NAVIGATION SERVICES: AVIATION METEOROLOGICAL SERVICES

## LIST OF REGULATIONS

## **SUBPART 1: GENERAL**

- 174.01.1 Definitions and interpretation in this Part
- 174.01.2 Applicability

## SUBPART 2: DESIGNATION AND CERTIFICATION AS A-MET SERVICE

- 174.02.2 Designation and certification of A-MET authority
- 174.02.3 Certification of other A-MET service providers
- 174.02.4 Application for A-MET services provider certificate or amendment thereof
- 174.02.5 Issue of A-MET services provider certificate
- 174.02.6 Renewal of A-MET services provider certificate
- 174.02.7 Duplicate certificate
- 174.02.8 Privileges of A-MET service provider certificate holder

# SUBPART 3: REQUIREMENTS TO BE COMPLIED WITH BY A-MET SERVICE IN RELATION TO AVIATION METEOROLOGICAL SERVICES

- 174.03.1 Manual of procedures and station standing instructions
- 174.03.2 A-MET service organisation
- 174.03.3 Personnel requirements
- 174.03.4 Training and checking programme
- 174.03.5 Site requirements
- 174.03.6 Communication requirements
- 174.03.7 Facility requirements
- 174.03.8 Document and record control system
- 174.03.9 Input meteorological information
- 174.03.10 Output meteorological information
- 174.03.11 Verification, periodic inspection, testing and calibration
- 174.03.12 Release of meteorological information
- 174.03.13 Notification of meteorological office and facility status
- 174.03.14 Meteorological information checks after accident or incident
- 174.03.15 Malfunctions and erroneous information
- 174.03.16 Records
- 174.03.17 Safety management system
- 174.03.18 Standards for provision of A-MET services

## **SUBPART 4: GENERAL**

- 174.04.1 Objective, determination and provision of meteorological services
- 174.04.2 Supply, use and quality management of meteorological information
- 174.04.3 Notification required from operators

# SUBPART 5: GLOBAL SYSTEMS, SUPPORTING CENTRES AND METEOROLOGICAL OFFICES

- 174.05.1 World area forecast system
- 174.05.2 World area forecast centres
- 174.05.3 Aerodrome meteorological offices
- 174.05.4 Meteorological watch offices
- 174.05.5 Volcanic ash advisory centres
- 174.05.6 Volcano observatories
- 174.05.7 Tropical cyclone advisory centre
- 174.05.8 Space weather centres

## SUBPART 6: METEOROLOGICAL OBSERVATIONS AND REPORTS

- 174.06.1 Aeronautical meteorological stations and observations
- 174.06.2 Agreement between A-MET service and ATS providers
- 174.06.3 Routine observations and reports
- 174.06.4 Special observations and reports
- 174.06.5 Contents of reports
- 174.06.6 Observing and reporting meteorological elements
- 174.06.7 Reporting meteorological information from automatic observing systems
- 174.06.8 Observations and reports of volcanic activity

#### SUBPART 7: AIRCRAFT OBSERVATIONS AND REPORTS

- 174.07.1 Obligation for reporting of observations
- 174.07.2 Types of aircraft observations
- 174.07.3 Routine aircraft observations and designation
- 174.07.4 Routine aircraft observations and data link
- 174.07.5 Special aircraft observations
- 174.07.6 Other non-routine aircraft observations
- 174.07.7 Reporting of aircraft observations during flight
- 174.07.8 Relay of air-reports by ATS units
- 174.07.9 Recording and post-flight reporting of aircraft observations of volcanic activity

## **SUBPART 8: FORECASTS**

- 174.08.1 Interpretation and use of forecasts
- Aerodrome forecasts
- 174.08.3 Landing forecasts
- 174.08.4 Forecasts for take-off
- 174.08.5 Area forecasts for low-level flights

# SUBPART 9: SIGMET AND AIRMET INFORMATION, AERODROME WARNINGS AND WIND SHEAR WARNINGS AND ALERTS

- 174.09.1 SIGMET information
- 174.09.2 AIRMET information
- Aerodrome warnings
- 174.09.4 Wind shear warnings and alerts

## SUBPART 10: AERONAUTICAL CLIMATOLOGICAL INFORMATION

- 174.10.1 General provisions
- 174.10.2 Aerodrome climatological tables
- 174.10.3 Aerodrome climatological summaries
- 174.10.4 Copies of meteorological observational data

## SUBPART 11: SERVICE FOR OPERATORS AND FLIGHT CREW MEMBERS

- 174.11.1 General provisions
- 174.11.2 Briefing, consultation and display
- 174.11.3 Flight documentation
- 174.11.4 Automated pre-flight information systems for briefing, consultation, flight planning and flight documentation
- 174.11.5 Information for aircraft in flight

# SUBPART 12: INFORMATION FOR AIR TRAFFIC SERVICES, SEARCH AND RESCUE SERVICES AND AERONAUTICAL INFORMATION SERVICES

174.12.1	Information for air traffic services units
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## SUBPART 13: REQUIREMENTS FOR AND USE OF COMMUNICATIONS

174.13.1	Requirements for communications	
174.13.2	Use of aeronautical fixed service communications: meteorological bulletins in	
	alphanumeric format	
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## SUBPART 1 GENERAL

#### Definitions and interpretation in this Part

**174.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-MET.

(2) For purposes of these regulations "A-MET service" includes, unless the context indicates otherwise, the entity that has been designated and certified under this Part as the A-MET Authority and any other MET service provider that has been certified under this Part to provide aviation meteorological services in terms of these regulations.

(3) Unless otherwise specified in this Part, where any act is required or expected to be performed or anything is required or expected to be done by the A-MET service in terms of these regulations, that act must be performed or thing must be done by the A-MET authority and by each of the certified A-MET service providers.

(4) Subregulation (3) does not apply where the A-MET authority or an A-MET service provider has been exempted from performing the act or doing the thing by the Executive Director under these regulations.

**174.01.2** (1) This Part -

- (a) prescribes -
  - (i) regulations and procedures governing the certification and operation of the A-MET authority and other organisations providing aviation meteorological services for air navigation within Namibia; and
  - (ii) requirements governing the provision of basic weather reports for aviation in accordance with Annex 3 to the Chicago Convention;
- (b) applies to the entity that has been designated and certified as the A-MET Authority and to any other organisation that applies to be certified or has been certified as an aviation meteorological service provider pursuant to these regulations and to Annex 3 to the Chicago Convention; and
- (c) sets out certain administrative rules applying to the Executive Director in the administration of this Part.
- (2) This Part does not apply to -
- (a) a person who is providing aviation meteorological services to military aircraft in the course of his or her duties for the Namibian Defence Force; or
- (b) any aviation meteorological services provided to military aircraft by the Namibian Defence Force.

#### SUBPART 2 DESIGNATION AND CERTIFICATION AS A-MET SERVICE

#### **Requirement for certification**

**174.02.1** (1) A person may not provide an aviation meteorological service in Namibia unless that person has been -

- (a) designated and certified as the A-MET authority under regulation 174.02.2; or
- (b) certified as a meteorological services provider under regulation 174.02.3,

and provides the service under the authority of, and in accordance with the provisions of a certificate issued in terms of this Part, and any additional requirements prescribed in Part 170.

(2) The A-MET service, in providing meteorological services for air navigation, must do so in accordance with the -

- (a) requirements specified in this Part;
- (b) technical standards set out in Document NAM-CATS-MET;
- (c) manual of procedures referred in regulation 174.03.1; and
- (d) applicable standards of the World Meteorological Organisation (WMO).

## Designation and certification of A-MET authority

**174.02.2** (1) The Namibian Meteorological Services (NMS) which is part of the Ministry is, for purposes of these regulations and of Annex 3 to the Chicago Convention, designated as the MET authority for Namibia.

- (2) The A-MET authority -
- (a) in conjunction with other A-MET service providers, is responsible for the provision of meteorological services for international air navigation in Namibia;
- (b) is, unless exempted under paragraph (c), subject to the certification requirements of this Part; and
- (c) may be exempted from certain certification requirements of this Part by the Executive Director in accordance with section 46 of the Act and Part 3.

## **Certification of other A-MET service providers**

**174.02.3** The Executive Director may issue a certificate authorising a person or an entity to provide A-MET services in Namibia, and the services to be provided may vary from a single aviation meteorological service to a range of aviation meteorological services.

## Application for A-MET services provider certificate or amendment thereof

174.02.4 An application for an A-MET services provider certificate, or an amendment thereof, must be -

- (a) made to the Executive Director in the appropriate form set out in Document NAM-CATS-MET; and
- (b) accompanied by -
  - (i) the manual of procedures referred to in regulation 174.03.1;
  - (ii) the appropriate fee as prescribed in Part 187.

### Issue of A-MET services provider certificate

**174.02.5** (1) The Executive Director may issue an A-MET services provider certificate, if the Executive Director is satisfied that -

- (a) the applicant meets the requirements prescribed in Part 170 and in this Part;
- (b) the applicant's personnel required by this Part are competent to perform their respective duties;
- (c) the applicant's senior personnel have not held a senior position in an organisation whose certificate was revoked by the Executive Director; and
- (d) the issuing of the certificate is not contrary to the interests of aviation safety.

(2) The A-MET services provider certificate referred to in subregulation (1) is issued in the appropriate form, and contains the information, set out in Document NAM-CATS-MET.

## **Renewal of A-MET services provider certificate**

**174.02.6** (1) An application for the renewal of an A-MET services provider certificate, must be -

- (a) made to the Executive Director on the appropriate form set out in Document NAM-CATS-MET; and
- (b) accompanied by -
  - (i) the manual of procedures referred to in 174.03.1; and
  - (ii) the appropriate fee as prescribed in Part 187.

(2) The holder of an A-MET services provider certificate must if it wishes to renew the certificate, at least 90 days immediately preceding the date on which the certificate expires, apply to the Executive Director for the renewal of such certificate.

## Duplicate certificate

174.02.7(1)An application for a duplicate certificate as contemplated in Part170 must be -

- (a) made in the appropriate form set out in Document NAM-CATS-MET; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(3) A duplicate of an A-MET services provider certificate is issued on the appropriate form set out in Document NAM-CATS-MET.

#### **Privileges of A-MET service provider certificate holder**

**174.02.8** The privileges of an A-MET service provider certificate are limited to the services authorised by the certificate and the appropriate specifications set out in Document NAM-CATS-MET.

#### SUBPART 3

# REQUIREMENTS TO BE COMPLIED WITH BY A-MET SERVICE IN RELATION TO AVIATION METEOROLOGICAL SERVICES

#### Manual of procedures and station standing instructions

**174.03.1** (1) The A-MET service must prepare a manual of procedures as required by, and in accordance with, the provisions of Part 170 and the standards set out in Document NAM-CATS-MET.

(2) The A-MET service must prepare standing station instructions (SSI) or their equivalent for each meteorological office listed in its manual of procedures.

(3) The standing station instructions form part of, and may be integrated with, the service provider's manual of procedures as required under Part 170.

(4) The station standing instructions must set out the procedures for the operation and maintenance of the meteorological office and associated facilities in accordance with requirements set out in Document NAM-CATS-MET.

## A-MET service organisation

**174.03.2** (1) The A-MET service must, at all times, maintain an appropriate organisation with sound and effective management structure to enable it to provide, in accordance with the standards set out in Document NAM-CATS-MET, the services covered by its designation or certificate.

(2) The A-MET service must establish in its organisation structures, MET systems, functions and activities and management and operational positions necessary for the safe and efficient provision of aviation meteorological services.

## **Personnel requirements**

**174.03.3** (1) The A-MET service must engage, employ or contract sufficient, competent and qualified personnel in accordance with the requirements prescribed in Part 170.

(2) The A-MET service must develop and publish job descriptions for all technical staff involved in the provision of MET services for air navigation.

(3) The A-MET service must comply with the personnel and qualification requirements set out in Document NAM-CATS-MET.

## Training and checking programme

**174.03.4** (1) The A-MET service must establish a training and checking programme as required under Part 170, and in accordance with requirements specified in Document NAM-CATS-MET, including procedures, for assessing the competence of personnel who are authorised to provide meteorological services.

(2) The A-MET service must comply with the requirements of the World Meteorological Organisation in respect of qualifications and training of meteorological personnel providing service for international air navigation.

(3) The A-MET service, in establishing a training and checking programme, must take into consideration the training and qualification requirements prescribed in WMO Publication No. 49, Technical Regulations, Volume I: General Meteorological Standards and Recommended Practices, Part VI: Education and Training.

(4) The A-MET service must maintain individual training records for each of its staff in accordance with the requirements of Part 170.

#### Site requirements

- 174.03.5 The A-MET service must establish procedures to ensure that -
- (a) each of the meteorological offices and facilities listed in its manual of procedures is -
  - (i) sited and configured in accordance with security measures designed to prevent unlawful or accidental interference; and
  - (ii) provided with suitable power supplies and means to ensure appropriate continuity of service; and
- (b) each of the remote weather sensing facilities listed in its manual of procedures is installed and maintained in a technically appropriate position to ensure that the facility provides an accurate representation of the local meteorological conditions.

## **Communication requirements**

**174.03.6** (1) The A-MET service must establish communication systems and procedures to ensure that each of the meteorological offices and facilities listed in its manual of procedures can provide the meteorological information for which it is intended.

(2) The communication systems and procedures must be capable of handling the volume and nature of the meteorological information being communicated so that no meteorological information is delayed to the extent that the information becomes out-of-date.

(3) The communication systems and procedures must be in accordance with the standards set out in Document NAM-CATS-MET.

## Facility requirements

174.03.7 (1) Where the A-MET service is required to provide a basic weather report, it must -

- (a) utilise equipment that is suitable for the observations being made;
- (b) employ a system for checking the equipment referred to in paragraph (a); and
- (c) ensure personnel are trained to provide accurate basic weather reports.

(2) The A-MET service must establish procedures to ensure that all electronic data processing facilities used in the acquisition, compilation, computing, access or dissemination of meteorological information are of a nature, configuration and capability to ensure the adequacy, accuracy and timeliness of that meteorological and related information.

(3) The meteorological instruments and equipment must meet the standards set out in Document NAM-CATS-MET and the related World Meteorological Organisation requirements.

## Document and record control system

**174.03.8** (1) The A-MET service must establish a system for the control of documents and records in accordance with Part 170 and the standards set out in Document NAM-CATS-MET.

(2) The A-MET service must put in place a system for the retention of documents and records in accordance with Part 170 and the standards set out in Document NAM-CATS-MET.

## Input meteorological information

**174.03.9** (1) The A-MET service must establish procedures to obtain input meteorological information appropriate for the meteorological services being provided.

(2) The procedures referred to in subregulation (1) must ensure that each meteorological office and facility listed in the A-MET service's manual of procedures that provides -

- (a) a forecast service, has continuing access to appropriate historical, real-time, and other meteorological information for the A-MET service's forecast areas;
- (b) a meteorological briefing service in person or by any other interactive visual means, has adequate display and briefing resources available for the briefings;

- (c) a meteorological reporting service, has adequate observing systems to supply adequate, accurate and timely meteorological reports;
- (d) a meteorological watch service, has adequate meteorological information to supply an adequate, accurate and timely meteorological watch service; and
- (e) a climatology service, has adequate meteorological information for the preparation of climatological information.

#### **Output meteorological information**

**174.03.10** (1) The A-MET service must -

- (a) identify the output meteorological information provided by each meteorological service listed in its manual of procedures; and
- (b) determine the standards and formats for that output meteorological information.

(2) The A-MET service must establish procedures to ensure that the meteorological information supplied by each meteorological office and facility listed in its manual of procedures complies with the standards and formats determined under subregulation (1)(b).

#### Verification, periodic inspection, testing and calibration

- **174.03.11** (1) The A-MET service must establish procedures for -
- (a) routine verification of meteorological information it provides;
- (b) periodic inspection of each meteorological office listed in the manual of procedures;
- (c) the periodic inspection, testing and calibration of each facility listed in its manual of procedures.
- (2) The procedures established in accordance with subregulation (1) must ensure that -
- (a) the systems required for the routine verification of meteorological information have the capability and integrity necessary for verifying the meteorological information;
- (b) appropriate inspection equipment and systems are available to personnel for the inspection of each meteorological office;
- (c) appropriate inspection, measuring and test equipment and systems are available to personnel for the inspection, testing and calibration of each facility;
- (d) the inspection, measuring and test equipment and systems have the precision and accuracy necessary for the inspections, measurements and tests being carried out; and
- (e) all meteorological sensing facilities are calibrated and configured so that the environmental sensors fitted or incorporated yield, as far as possible, reliable, accurate and representative meteorological information.

#### **Release of meteorological information**

174.03.12 (1) The A-MET service must establish procedures for -

- (a) the release of meteorological information and for placing of facilities listed in its manual of procedures into operational service;
- (b) the release of meteorological information from each meteorological office listed in its manual of procedures; and
- (c) the placing of facilities listed in its manual of procedures into operational service.

(2) The procedures referred to in subregulation (1) must ensure that persons authorised to supervise the production and release of meteorological information and persons authorised to place meteorological facilities into operational service have been assessed as competent.

#### Notification of meteorological office and facility status

**174.03.13** (1) The A-MET service must establish procedures to notify the users of its services of relevant operational information and of any change in the operational status of each meteorological office or facility listed in its manual of procedures.

(2) The A-MET service must ensure that the procedures established in accordance with subregulation (1) require -

- (a) the operational information for each of its meteorological services that support the Namibian air navigation system or an air traffic service (ATS) to be forwarded to the aeronautical information services (AIS) for publication in the aeronautical information publication (AIP);
- (b) the users of a meteorological office or facility to be notified without delay of any change in the operational status of the meteorological office or facility, if the change may affect the safety of air navigation;
- (c) the information regarding any change to the operational status of meteorological offices and facilities published in the AIP to be forwarded to the AIS for the issue of a NOTAM.

#### Meteorological information checks after accident or incident

**174.03.14** (1) The A-MET service must establish procedures for checking the adequacy, accuracy and timeliness of any of its meteorological information that may have been used by an aircraft or an air traffic service involved in an accident or incident.

- (2) The procedures referred to in subregulation (1) must ensure that -
- (a) a person is designated to coordinate the checks;
- (b) the persons carrying out the checks required by paragraph (c) must not include anyone who was the last person to work on the equipment providing the meteorological information;
- (c) the checks are carried out as soon as possible after notification to the A-MET service of such an accident or incident; and
- (d) copies of the meteorological information are kept in a secure place for possible use by any subsequent investigation.

## Malfunctions and erroneous information

174.03.15 The A-MET service must establish procedures -

- (a) to identify, record, notify, investigate and rectify any report of erroneous meteorological information;
- (b) to identify, record, notify, investigate and rectify any detected malfunction in the facilities and meteorological services listed in its manual of procedures that may result in the supply of erroneous meteorological information;
- (c) to notify without delay all users that have received the erroneous meteorological information;
- (d) to notify the Executive Director, within 12 hours, of those malfunctions that cannot be remedied within 72 hours; and
- (e) for the continuation of malfunction status reports in the event that such reports are required by the Executive Director.

#### Records

**174.03.16** (1) The A-MET service must establish procedures to identify, collect, index, store, maintain and dispose of the records that are necessary for the supply of the meteorological services listed in its manual of procedures.

(2) The procedures referred to in subregulation (1) must be established in accordance with the requirements set out in Document NAM-CATS-MET.

#### Safety management system

**174.03.17** The A-MET service must establish, implement, and maintain a system for the management of safety in accordance with Parts 140 and 170 and the standards set out in Document NAM-CATS-MET.

#### Standards for provision of A-MET services

**174.03.18** (1) The A-MET service must provide meteorological information for air navigation in accordance with -

- (a) provisions of this Part;
- (b) the standards set out in Document NAM-CATS-MET;
- (c) the standards set by the World Meteorological Organisation, as varied by the AIP; and
- (d) the procedures and practices in the A-MET service's manual of procedures.

(2) The A-MET service may not provide meteorological information where the information provided does not meet the requirements specified in this Part and where limitations as specified in Document NAM-CATS-MET exist.

(3) The A-MET service must, before providing the service, be satisfied that -

- (a) the personnel are adequate in number and have the necessary competency to provide the service;
- (b) the manual of procedures contains all the relevant information;
- (c) the facilities, services and equipment are established in accordance with these regulations;
- (d) the operating procedures make satisfactory provision for the safety of air navigation; and
- (e) an approved quality management system is in place.

## SUBPART 4 GENERAL

#### Objective, determination and provision of meteorological services

174.04.1 The A-MET service must -

- (a) provide services with the sole objective of contributing to the safety, regularity and efficiency of air navigation;
- (b) supply meteorological information to users including aircraft operators, flight crew members, air traffic services units, search and rescue services units, aerodromes management and others concerned with the conduct or development of air navigation to enable them to perform their functions;
- (c) determine the meteorological services it will provide to meet the needs of air navigation; and
- (d) in providing meteorological services for air navigation, comply with the standards set out in Document NAM-CATS-MET and the applicable requirements of the World Meteorological Organisation.

#### Supply, use and quality management of meteorological information

**174.04.2** (1) The A-MET service must -

- (a) liaise closely with the users of meteorological information in accordance with the standards set out in Document NAM-CATS-MET; and
- (b) establish, implement and demonstrate compliance with a quality system to provide for the quality management of meteorological information supplied to those concerned with the conduct or development of air navigation.

(2) The quality system required under subregulation (1)(b) must be established and implemented in accordance with the standards set out in Document NAM-CATS-MET.

#### Notification required from operators

**174.04.3** (1) The A-MET service must establish procedures for receiving and responding to requests from operators regarding meteorological services or changes in existing meteorological service.

(2) An operator requiring a meteorological service or changes in an existing meteorological service must notify, sufficiently in advance, the A-MET service or the aerodrome meteorological office concerned in accordance with the standards set out in Document NAM-CATS-MET.

#### SUBPART 5 GLOBAL SYSTEMS, SUPPORTING CENTRES AND METEOROLOGICAL OFFICES

#### World area forecast system

**174.05.1** If the A-MET service, has been assigned or has accepted responsibility for providing aeronautical meteorological en-route forecasts within the framework of the world area forecast system (WAFS), the A-MET service must arrange to provide the services in accordance with the standards set out in Document NAM-CATS-MET.

#### World area forecast centres

**174.05.2** If the A-MET service, has been assigned or has accepted responsibility for providing a world area forecast centre (WAFC) within the framework of the world area forecast system, the A-MET service must arrange to provide the services in accordance with the standards set out in Document NAM-CATS-MET.

#### Aerodrome meteorological offices

**174.05.3** (1) The A-MET service must, in accordance with the standards set out in Document NAM-CATS-MET -

- (a) establish meteorological offices for the provision of the meteorological service for air navigation; and
- (b) make arrangements at the aerodromes for which aerodrome meteorological offices have not been established.

(2) The aerodrome meteorological offices established in terms of subregulation (1) must carry out their functions in accordance with the standards set out in Document NAM-CATS-MET.

(3) Aerodromes for which landing forecasts are required must be determined on the basis of regional air navigation agreements.

#### **Meteorological watch offices**

**174.05.4** (1) The A-MET service must establish one or more meteorological watch offices to provide meteorological information within the flight information region or control areas for which Namibia has been assigned, or has accepted the responsibility for the provision of air traffic services.

(2) The meteorological watch offices established under subregulation (1) must carry out their functions in accordance with the standards set out in Document NAM-CATS-MET.

#### Volcanic ash advisory centres

**174.05.5** (1) If the A-MET service has been assigned or has accepted the responsibility for providing a volcanic ash advisory centre (VAAC) within the framework of the international airways volcano watch, the A-MET service must arrange to provide that service in accordance with the standards set out in Document NAM-CATS-MET.

(2) In case of interruption of the operation of a VAAC, the A-MET service must ensure that the functions of the VAAC are carried out by another VAAC or meteorological centre.

## Volcano observatories

**174.05.6** The A-MET service must make arrangements for the monitoring, observation and reporting of active or potentially active volcanoes as set out in Document NAM-CATS-MET.

## Tropical cyclone advisory centre

**174.05.7** If the A-MET service has been assigned or has accepted responsibility for providing a tropical cyclone advisory centre (TCAC), the A-MET service must arrange to provide the services within its area of responsibility in accordance with the standards set out in Document NAM-CATS-MET.

## Space weather centres

**174.05.8** If the A-MET service has been assigned or has accepted the responsibility for providing a space weather centre (SWXC), the A-MET service must arrange for that centre to monitor and provide advisory information on space weather phenomena in its area of responsibility by arranging for that centre in accordance with the standards set out in Document NAM-CATS-MET.

#### SUBPART 6 METEOROLOGICAL OBSERVATIONS AND REPORTS

#### Aeronautical meteorological stations and observations

**174.06.1** (1) The A-MET service must, at aerodromes in Namibia, establish such aeronautical meteorological stations as it determines to be necessary to comply with the requirements of these regulations.

(2) An aeronautical meteorological station must be established and equipped in accordance with the standards set out in Document NAM-CATS-MET.

(3) The aeronautical meteorological stations established in accordance with subregulation (1) must make routine observations as set out in Document NAM-CATS-MET.

#### Agreement between A-MET service and ATS provider

**174.06.2** (1) The A-MET service must enter into an agreement with ATS providers for the provision of meteorological information and systems necessary for the provision of air traffic services.

(2) The agreement between the A-MET service and ATS providers must cover those services and systems necessary for the provision of meteorological information as set out in Document NAM-CATS-ATS.

#### **Routine observations and reports**

**174.06.3** (1) The A-MET service must make routine observations at aerodromes, at such times and intervals as specified in Document NAM-CATS-MET.

(2) Routine observations and reports must be issued in accordance with the standards set out in Document NAM-CATS-MET.

## Special observations and reports

**174.06.4** (1) The A-MET service must establish the criteria for reporting of special observations by the ATS service provider, operators and others concerned.

(2) Reports of special observations must be issued in accordance with the standards set out in Document NAM-CATS-MET.

#### **Contents of reports**

**174.06.5** The A-MET service must ensure that the contents of meteorological reports, which include local routine and special reports, current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI) that it issues, comply with the standards set out in Document NAM-CATS-MET.

#### Observing and reporting meteorological elements

**174.06.6** The A-MET service must ensure that observation and reporting of the following meteorological elements is carried out in accordance with the standards set out in Document NAM-CATS-MET:

- (a) surface wind;
- (b) visibility;
- (c) runway visual range;
- (d) present weather;
- (e) clouds;
- (f) air temperature and dew-point temperature;
- (g) atmospheric pressure; and
- (h) any other supplementary information.

#### Reporting meteorological information from automatic observing systems

**174.06.7** The A-MET service must ensure that meteorological information, such as METAR, SPECI, local routine and special reports, received from automatic observing systems is reported in accordance with the standards set out in Document NAM-CATS-MET.

#### Observations and reports of volcanic activity

**174.06.8** The A-MET service must ensure that the observation and reporting of volcanic activity is carried out in accordance with the standards set out in Document NAM-CATS-MET.

#### SUBPART 7 AIRCRAFT OBSERVATIONS AND REPORTS

#### **Obligation for reporting of observations**

**174.07.1** The A-MET service, with the concurrence of the air traffic services (ATS) provider, must make arrangements for -

- (a) observations to be made by aircraft registered in Namibia and operating on international air routes; and
- (b) the recording and reporting of observations made by aircraft as contemplated in paragraph (a).

#### **Types of aircraft observations**

174.07.2 Observations made by aircraft in accordance with regulation 174.07.1, must include -

- (a) routine aircraft observations during en-route and climb-out phases of the flight; and
- (b) special and other non-routine aircraft observations during any phase of the flight.

#### Routine aircraft observations and designation

**174.07.3** Routine aircraft observations and the designation of aircraft for the purpose of making routine aircraft observations must be in accordance with the standards set out in Document NAM-CATS-MET.

#### Routine aircraft observations and data link

174.07.4 An aircraft may not make routine aircraft observations unless it is equipped with air-ground data link.

#### Special aircraft observations

174.07.5 All aircraft that is operating within the airspace of Namibia must make special aircraft observations in accordance with standards set out in Document NAM-CATS-MET.

#### Other non-routine aircraft observations

**174.07.6** The pilot-in-command of an aircraft when encountering other meteorological conditions as specified in Document NAM-CATS-MET which, in his or her opinion, may affect the safety or efficiency of other aircraft operations, must advise the appropriate air traffic services unit as soon as possible.

## Reporting of aircraft observations during flight

**174.07.7** Aircraft observations during flight must be reported in accordance with the standards set out in Document NAM-CATS-MET.

## Relay of air reports by ATS units

**174.07.8** The A-MET service, with the concurrence of an ATS provider, must have arrangements in place to ensure that ATS units receiving air reports relay them to the A-MET service in accordance with the standards set out in Document NAM-CATS-MET.

#### Recording and post-flight reporting of aircraft observations of volcanic activity

**174.07.9** The A-MET service must have in place, arrangements for the recording and post-flight reporting of aircraft observations of volcanic activity in accordance with the standards set out in Document NAM-CATS-MET.

## SUBPART 8 FORECASTS

#### Interpretation and use of forecasts

**174.08.1** The A-MET service must ensure that the interpretation and use of forecasts comply with the standards set out in Document NAM-CATS-MET.

#### Aerodrome forecasts

174.08.2 The A-MET service must -

- (a) prepare aerodrome forecasts for aerodromes for which it has the responsibility to provide MET services; and
- (b) ensure that aerodrome forecasts are prepared, issued and amended in accordance with the standards set out in Document NAM-CATS-MET.

## Landing forecasts

**174.08.3** The A-MET service must, for aerodromes for which they have MET service responsibility, prepare a landing forecast in accordance with the standards set out in Document NAM-CATS-MET.

## Forecasts for take-off

**174.08.4** The A-MET service must, for those aerodromes for which they have the responsibility to provide MET services, prepare a forecast for take-off in accordance with the standards set out in Document NAM-CATS-MET.

#### Area forecasts for low-level flights

**174.08.5** The A-MET service must prepare and issue area forecasts for low-level flights in accordance with the standards set out in Document NAM-CATS-MET.

#### SUBPART 9 SIGMET AND AIRMET INFORMATION, AERODROME WARNINGS AND WIND SHEAR WARNINGS AND ALERTS

## **SIGMET** information

**174.09.1** The meteorological watch office must ensure that significant meteorological (SIGMET) information is issued in accordance with the standards set out in Document NAM-CATS-MET.

## **AIRMET** information

**174.09.2** The meteorological watch office must ensure that airmen's meteorological (AIRMET) information is issued in accordance with the standards set out in Document NAM-CATS-MET.

## Aerodrome warnings

**174.09.3** The meteorological watch office must ensure that aerodrome warnings are issued in accordance with the standards set out in Document NAM-CATS-MET.

### Wind shear warnings and alerts

**174.09.4** The meteorological watch office must ensure that wind shear warnings are issued in accordance with the standards set out in Document NAM-CATS-MET.

#### SUBPART 10 AERONAUTICAL CLIMATOLOGICAL INFORMATION

#### General provisions

**174.10.1** The A-MET service must prepare and supply to the users, aeronautical climatological information required for the planning of flight operations as agreed between the A-MET service and those users in accordance with requirements set out in Document NAM-CATS-MET.

#### Aerodrome climatological tables

174.10.2 The A-MET service must -

- (a) make arrangements for collecting and retaining the necessary observational data; and
- (b) have the capability to prepare and make available to the users, aerodrome climatological tables in accordance with the standards set out in Document NAM-CATS-MET.

#### Aerodrome climatological summaries

**174.10.3** The A-MET service must ensure that aerodrome climatological summaries are prepared in accordance with the procedures specified by the World Meteorological Organisation and the standards set out in Document NAM-CATS-MET.

#### **Copies of meteorological observational data**

**174.10.4** The A-MET service must, upon request and to the extent practicable, make available to operators and to other persons concerned with the application of meteorology to air navigation, meteorological observational data required for research, investigation or operational analysis.

#### SUBPART 11 SERVICE FOR OPERATORS AND FLIGHT CREW MEMBERS

#### **General provisions**

**174.11.1** The A-MET service must supply meteorological information to operators and flight crew members in accordance with the standards set out in Document NAM-CATS-MET.

#### Briefing, consultation and display

**174.11.2** The A-MET service must provide briefing or consultation, on request, to flight crew members or other flight operations personnel in accordance with the standards set out in Document NAM-CATS-MET.

## **Flight documentation**

**174.11.3** The A-MET service must make available flight documentation comprising meteorological information in accordance with the standards set out in Document NAM-CATS-MET.

# Automated pre-flight information systems for briefing, consultation, flight planning and flight documentation

**174.11.4** The A-MET service must ensure that automated pre-flight information systems for briefing, consultation, flight planning and flight documentation are in accordance with the standards set out in Document NAM-CATS-MET.

## Information for aircraft in flight

**174.11.5** A meteorological office or a meteorological watch office must ensure that meteorological information for aircraft in flight is supplied to its associated air traffic services unit in accordance with the standards set out in Document NAM-CATS-MET.

#### **SUBPART 12**

## INFORMATION FOR AIR TRAFFIC SERVICES, SEARCH AND RESCUE SERVICES AND AERONAUTICAL INFORMATION SERVICES

#### Information for air traffic services units

- 174.12.1 The A-MET service must ensure that the established -
  - (a) aerodrome meteorological office; or
  - (b) meteorological watch office,

associated with each air traffic services unit supplies up-to-date meteorological information to the air traffic service unit as necessary for the conduct of its functions in accordance with the standards set out in Document NAM-CATS-MET.

#### Information for search and rescue services units

**174.12.2** The A-MET service must supply search and rescue (SAR) services units with the meteorological information they require in a form established by mutual agreement and for this purpose, the A-MET service must maintain liaison with the search and rescue services units throughout a search and rescue operation.

#### Information for aeronautical information services units

**174.12.3** The A-MET service must arrange for the supply of up-to-date meteorological information to relevant air information services AIS units, as necessary, for the conduct of the functions of the AIS units.

## SUBPART 13 REQUIREMENTS FOR AND USE OF COMMUNICATIONS

#### **Requirements for communications**

**174.13.1** The A-MET service must make available, suitable telecommunications facilities to permit the supply of the required meteorological information to air traffic services units in accordance with the standards set out in Document NAM-CATS-MET.

# Use of aeronautical fixed service communications: meteorological bulletins in alphanumeric format

**174.13.2** Meteorological bulletins containing operational meteorological information to be transmitted via the aeronautical fixed service must be originated in accordance with the standards set out in Document NAM-CATS-MET.

## Use of aeronautical fixed service communications: WAFS products

**174.13.3** The A-MET service must make arrangements for the use of aeronautical fixed service communications for the transmission of world area forecast system (WAFS) products in accordance with the standards set out in Document NAM-CATS-MET.

## Use of aeronautical mobile service communications

**174.13.4** The A-MET service must make arrangements for the use of aeronautical mobile service communications for the transmission of meteorological information in accordance with the standards set out in Document NAM-CATS-MET.

## Use of aeronautical data link service: contents of D-VOLMET

**174.13.5** The A-MET service must make arrangements for the use of aeronautical data link services for the transmission of current aerodrome routine meteorological reports which include METAR, SPECI, aerodrome forecasts (TAF), SIGMET, special air-reports not covered by SIGMET and, where available, AIRMET, in accordance with the standards set out in Document NAM-CATS-MET.

## Use of aeronautical broadcasting service: contents of VOLMET broadcasts

**174.13.6** The A-MET service must make arrangements for the use of aeronautical broadcasting service for the transmission of current METAR, SPECI, TAF, and SIGMET in accordance with the standards set out in Document NAM-CATS-MET.

#### **PART 175**

## AIR NAVIGATION SERVICES: AERONAUTICAL INFORMATION SERVICES AND AERONAUTICAL CHARTS

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175 00 0	A '1 1 '1'

175.09.2 Availability

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# SUBPART 1 GENERAL

## **Definitions for this Part**

**175.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-AIS.

(2) In this Part, reference to an "aeronautical information service (AIS) provider" means a person certified under this Part, to provide aeronautical information services and aeronautical charts for air navigation.

## Applicability

**175.01.2** (1) This Part -

- (a) applies to the provision of aeronautical information services and aeronautical charts within Namibia;
- (b) sets out certain administrative rules relating to the Executive Director in the administration of this Part.
- (2) This Part does not apply to -
- (a) a person who is providing an aeronautical information service or aeronautical charts to military aircraft in the course of his or her duties for the Namibian Defence Force; or
- (b) any aeronautical information services and aeronautical charts provided to military aircraft by the Namibian Defence Force.

## Standards for provision of aeronautical information services

175.01.3 (1) An AIS provider must provide aeronautical information services in accordance with -

- (a) the requirements prescribed in Part 170;
- (b) the requirements prescribed in this Part;
- (c) the requirements of any other Parts referred to in this Part;
- (d) the provisions set out or referred to in the current versions of ICAO Annexes 4 and 15;
- (e) the standards set out or referred to in current versions of ICAO Docs 10066, 8126, and 8697 and any other relevant ICAO documents;
- (f) any applicable standards set out in Document NAM-CATS-AIS;
- (g) the provisions of the Authority's Procedures for Aeronautical Information Management and any other relevant Authority documents; and

(h) the AIS provider's manual of procedures.

(2) An AIS provider may deviate from the standards prescribed under this Part if an emergency, or any other circumstance, arises that makes the deviation necessary in the interests of aviation safety.

(3) The AIS provider must, as soon as possible, inform the Executive Director of any deviation referred to in subregulation (2) and how long the deviation is likely to last.

## Common reference systems for air navigation

**175.01.4** The common reference systems to be used for air navigation must be in accordance with the standards set out in Document NAM-CATS-AIS.

## **Miscellaneous specifications**

**175.01.5** An AIS provider must ensure that aeronautical information products intended for international distribution are in accordance with the standards set out in Document NAM-CATS-AIS.

## SUBPART 2 CERTIFICATION OF AIS PROVIDERS

## **Requirement for certification**

175.02.1 A person may not provide an aeronautical information service, including aeronautical charts, except -

- (a) under the authority of, and in accordance with the provisions of a certificate issued under Part; the requirements prescribed in Part 170, and the standards set out in Document NAM-CATS-AIS; or
- (b) where the aeronautical information service is provided in accordance with the provisions of regulation 175.04.1.

# Application for AIS provider certificate or amendment thereof

175.02.2 An application for an AIS provider certificate, or an amendment thereof, must be -

- (a) made to the Executive Director in the appropriate form set out in Document NAM-CATS-AIS; and
- (b) accompanied by -
  - (i) the manual of procedures referred to in regulation 175.03.1;
  - (ii) the appropriate fee as prescribed in Part 187.

## Issue of AIS provider certificate

**175.02.3** (1) The Executive Director may issue an AIS provider certificate, if the Executive Director is satisfied that -

(a) the applicant meets the requirements prescribed in Part 170 and in this Part;

- (b) the applicant's personnel required by this Part are competent to perform their respective duties;
- (c) the applicant's senior personnel have not held a senior position in an organisation whose certificate was revoked by the Executive Director; and
- (d) the issuing of the certificate is not contrary to the interests of aviation safety.

(2) The AIS provider certificate referred to in subregulation (1) is issued in the appropriate form, and contains the information, set out in Document NAM-CATS-AIS.

## **Renewal of AIS provider certificate**

175.02.4 (1) An application for the renewal of an AIS provider certificate, must be -

- (a) made to the Executive Director on the appropriate form set out in Document NAM-CATS-AIS; and
- (b) accompanied by -
  - (i) the manual of procedures referred to in 175.03.1; and
  - (ii) the appropriate fee as prescribed in Part 187.

(2) The holder of an AIS provider certificate must if it wishes to renew the certificate, at least 90 days immediately preceding the date on which the certificate expires, apply to the Executive Director for the renewal of such certificate.

## **Duplicate certificate**

175.02.5(1)An application for a duplicate certificate as contemplated in Part170 must be -

- (a) made in the appropriate form set out in Document NAM-CATS-AIS; and
- (b) accompanied by the appropriate fee as prescribed in Part 187.

(2) A duplicate of an AIS services provider certificate is issued on the appropriate form set out in Document NAM-CATS-AIS.

## Privileges of AIS provider certificate holder

**175.02.6** The privileges of an AIS provider certificate are limited to the services authorised by the certificate and the appropriate specifications set out in Document NAM-CATS-AIS.

## Limitations on certificate holder

175.02.7 An AIS provider may not provide aeronautical information where -

- (a) the input data or information required to provide that aeronautical information is not available;
- (b) the operational performance of the aeronautical information service office or facility producing that aeronautical information does not meet the applicable requirements;

- (c) any integrity monitoring system associated with that aeronautical information is not fully functional;
- (d) any required verification or validation, relating to that aeronautical information has not been completed; or
- (e) there is any cause whatsoever to suspect the integrity of that aeronautical information.

# SUBPART 3

# **REQUIREMENTS TO BE COMPLIED WITH BY AIS PROVIDERS**

## Manual of procedures

**175.03.1** The holder of an AIS provider certificate must at all times, maintain a manual of procedures that -

- (a) complies with the requirements of this Part and of Part 170; and
- (b) contains the information set out in Document NAM-CATS-AIS.

## AIS provider organisation

**175.03.2** (1) An AIS provider must, at all times, maintain an appropriate organisation with a sound and effective management structure to enable it to provide, in accordance with the standards set out in Document NAM-CATS-AIS, the services covered by its certificate.

(2) An AIS provider must establish in its organisation structures, aeronautical information service systems, functions and activities and management and operational positions necessary for the safe and efficient provision of aeronautical information services.

## **Personnel requirements**

175.03.3 An AIS provider must -

- (a) employ, contract or engage aeronautical information service personnel in accordance with Parts 140 and 170;
- (b) establish aeronautical information service qualification and training requirements to ensure that each member of the aeronautical information service personnel maintains the appropriate level of qualification;
- (c) define the method by which staffing levels are determined in relation to the aeronautical information services to be provided and the procedure for their recruitment and progression; and
- (d) develop and include in its manual of procedures, job descriptions for technical personnel involved in the provision of aeronautical information services.

## **Station standing instructions**

**175.03.4** (1) An AIS provider must provide a station standing instructions (SSI) for each AIS office listed in its manual of procedures.

(2) The SSI referred to in subregulation (1) must set out the procedures for the operation and maintenance of the AIS office and associated facilities and must include information on -

- (a) the aeronautical information service information and services provided;
- (b) the minimum acceptable operating parameters and standards for facilities;
- (c) the minimum data and information inputs required;
- (d) the minimum performance and quality levels for output aeronautical information service information and services provided; and
- (e) any mandatory check procedures for releasing aeronautical information service information.
- (3) The SSI may be integrated with the AIS provider's manual of procedures.

## Training and checking programme

**175.03.5** (1) An AIS provider must develop and implement a training and checking programme that is of an adequate standard to ensure that AIS personnel maintain their competence and are provided with ongoing training appropriate to their duties.

(2) The training and checking programme must include a training policy and programme with basic, specialisation, and continuation trainings and training plan to ensure that all aeronautical information service activities can be performed.

(3) The AIS provider must maintain individual training records for each of its staff in accordance with Part 170.

### AIS provider facilities and equipment

175.03.6 An AIS provider must provide and maintain adequate facilities and equipment necessary for providing the services listed in its manual of procedures, including -

- (a) providing premises and equipment appropriate for the AIS provider's employees to carry out their work; and
- (b) ensuring that employees have access to all necessary aeronautical data and aeronautical information.

## Safety management system

**175.03.7** The AIS provider must implement a safety management system in accordance with Part 170.

## Publication of aeronautical charts

**175.03.8** (1) An AIS provider must ensure the publication of aeronautical charts that are operationally suitable for the following phases of flight:

- (a) taxiing from aircraft stand to take-off point;
- (b) take-off and climb to en-route air traffic services (ATS) route structure;
- (c) en-route ATS structure;
- (d) descent to approach;

- (e) approach to land and missed approach; and
- (f) landing and taxiing to aircraft stand.

(2) An AIS provider must ensure that the aeronautical information and aeronautical data published on the aeronautical charts are published in accordance with -

- (a) the standards, format, resolution and quality set out or referred to in -
  - (i) Subpart 9; and
  - (ii) applicable standards set out in Document NAM-CATS-AIS;
- (b) the accuracy standards set out or referred to in -
  - (i) Part 172 and NAM-CATS-ATS; and
  - (ii) Part 139 and NAM-CATS-AH.

## Error correction and notification

**175.03.9** (1) An AIS provider must establish procedures to record, investigate, correct and report any errors concerning aeronautical information and aeronautical data published.

- (2) The procedures in accordance with subregulation (1) must ensure that -
- (a) the error is corrected by the most appropriate means relative to the operational significance of the error;
- (b) the corrected aeronautical data or aeronautical information is clearly identified;
- (c) the source of the error is identified; and
- (d) processes are established to eliminate the source of the error.

# Directive to amend published aeronautical data and aeronautical information

**175.03.10** The Executive Director may, in writing, direct an AIS provider to amend published aeronautical information or data if it is necessary in the interests of aviation safety.

# **Documents and records**

**175.03.11** (1) An AIS provider must establish a system for the maintenance of documents and records in accordance with the requirements prescribed in Part 170.

- (2) The AIS provider must -
- (a) establish procedures to record, collect, index, store, secure, maintain, access and dispose of the records that are necessary for the aeronautical information services listed its manual of procedures; and
- (b) establish, and put into effect, a system for controlling documents and records relating to the aeronautical information services that it provides, including the policies and procedures for making, amending, preserving and disposing of those documents and records.

## SUBPART 4 RESPONSIBILITIES AND FUNCTIONS

## **Responsibilities of Executive Director**

175.04.1 (1) The Executive Director may -

- (a) provide an aeronautical information service;
- (b) agree with one or more other States for the provision of a joint service; or
- (c) delegate the authority for the provision of the aeronautical information service to a non-governmental agency provided that the service is provided in accordance with this Part and the standards set out in Document NAM-CATS-AIS.

(2) The Executive Director must make arrangements for the provision of aeronautical data and aeronautical information covering the territory of Namibia and those areas over the high seas for which Namibia is responsible for the provision of air traffic services.

- (3) The Executive Director must ensure that -
- (a) the provision of aeronautical data and aeronautical information is in accordance with standards set out in Document NAM-CATS-AIS;
- (b) the entity providing aeronautical data and aeronautical information is certified in accordance with the requirements of Part 170.

(4) Despite the requirements of subregulations (1), (2) and (3), the Executive Director remains responsible for aeronautical data and aeronautical information provided for and on behalf of Namibia.

## AIS provider responsibilities and functions

175.04.2 An AIS provider must ensure that aeronautical data and aeronautical information necessary for the safety, regularity and efficiency of air navigation is made available in accordance with the standards set out in Document NAM-CATS-AIS.

## Exchange of aeronautical data and aeronautical information

**175.04.3** An AIS provider must make arrangements for the exchange of aeronautical data and aeronautical information in accordance with the standards set out in Document NAM-CATS-AIS.

# Copyright

175.04.4 An AIS provider may, as determined by the Executive Director, apply copyright to its products in accordance with the standards set out in Document NAM-CATS-AIS and any other applicable laws of Namibia.

## Cost recovery

175.04.5 An AIS provider must make arrangements for the recovery of the overhead costs of collecting and compiling aeronautical data and information in accordance with the standards set out in Document NAM-CATS-AIS.

## **Information management requirements**

**175.05.1** An AIS provider must establish adequate information management resources and processes to ensure the timely collection, processing, storing, integration, exchange and delivery of quality-assured aeronautical data and aeronautical information within the air traffic management (ATM) system.

## Data quality specifications

175.05.2 An AIS provider must ensure that aeronautical data quality specifications are in accordance with the standards set out in Document NAM-CATS-AIS.

## Aeronautical data and aeronautical information verification and validation

**175.05.3** An AIS provider must establish procedures and processes for validation and verification of aeronautical data and aeronautical information in accordance with the standards set out in Document NAM-CATS-AIS.

## **Data error detection**

175.05.4 An AIS provider must use digital data error detection techniques during the transmission or storage of aeronautical data and digital data sets in accordance with the standards set out in Document NAMCATS-AIS.

## Use of automation

**175.05.5** An AIS provider must apply automation in order to ensure the quality, efficiency and cost-effectiveness of aeronautical information services in accordance with the standards set out in Document NAM-CATS-AIS.

#### Quality management system

**175.05.6** An AIS provider must implement and maintain a quality management system encompassing all functions of an AIS provider as described in regulation 175.04.2 and in accordance with the standards set out in Document NAM-CATS-AIS.

## Human factors considerations

**175.05.7** An AIS provider must, in the management and distribution of aeronautical data and aeronautical information, take into consideration human factors principles in accordance with the standards set out in Document NAM-CATS-AIS.

# SUBPART 6 SCOPE OF AERONAUTICAL DATA AND AERONAUTICAL INFORMATION

#### Scope of aeronautical data and aeronautical information

**175.06.1** An AIS provider must ensure that the scope of aeronautical data and aeronautical information it receives and manages is in accordance with the standards set out in Document NAM-CATS-AIS.

## Metadata

175.06.2 An AIS provider must in accordance with the standards set out in Document NAM-CATS-AIS -

- (a) collect metadata for aeronautical data processes and exchange points; and
- (b) ensure that metadata collection is applied throughout the aeronautical information data chain.

## SUBPART 7 AERONAUTICAL INFORMATION PRODUCTS AND SERVICES

## General

**175.07.1** (1) An AIS provider must provide aeronautical information in the form of aeronautical information products and associated services.

(2) The AIS provider must ensure that the specifications of aeronautical data provided for each aeronautical information complies with the standards set out in Document NAM-CATS-AIS.

(3) Where aeronautical data and aeronautical information are provided in multiple formats, the AIS provider must implement processes to ensure data and information consistency between formats.

## Aeronautical information in standardised presentation

**175.07.2** (1) The aeronautical information provided in a standardised presentation must include, Aeronautical Information Publication (AIP), AIP Amendments, AIP Supplements, Aeronautical Information Circulars (AICs), NOTAMs and Aeronautical Charts.

(2) The specifications for, and provision of, the information provided in terms of subregulation (1) must be in accordance with the standards set out in Document NAM-CATS-AIS.

## Digital data sets

175.07.3 (1) An AIS provider must ensure that digital data is provided in the form of data sets.

(2) The specifications, contents and provision of the data sets must be in accordance with the standards set out in Document NAM-CATS-AIS.

## **Distribution services**

175.07.4 An AIS provider must make arrangements for the distribution of -

- (a) aeronautical information products, including NOTAMs, in the form and manner described in Document NAM-CATS-AIS; and
- (b) AIP, AIP amendments, AIP supplements and AIC by the most expeditious means.

## **Pre-flight information service**

**175.07.5** An AIS provider, providing a service for any aerodrome or heliport used for international air operations must make arrangements for the provision of pre-flight information service to personnel concerned with flight operations in accordance with the standards set out in Document NAM-CATS-AIS.

## Post-flight information service

**175.07.6** An AIS provider, providing a service for any aerodrome or heliport used for international air operations must make arrangements for the provision of post-flight information service in accordance with the standards set out in Document NAM-CATS-AIS.

## SUBPART 8 AERONAUTICAL INFORMATION UPDATES

#### **General specifications**

175.08.1 An AIS provider must make arrangements to keep up to date, aeronautical data and aeronautical information.

## Aeronautical information regulation and control

**175.08.2** (1) An AIS provider must establish procedures for the use of the regulated system (AIRAC) based upon a series of common effective dates at intervals of 28 days as described in Document NAM-CATS-AIS.

(2) The AIRAC system must be used when distributing aeronautical information concerning the establishment, withdrawal or significant changes in accordance with the standards set out in Document NAM-CATS-AIS.

## Aeronautical information product updates

175.08.3 An AIS provider must make arrangements for the updates of the AIP, NOTAMs and data sets in accordance with the standards set out in Document NAM-CATS-AIS.

## SUBPART 9 AERONAUTICAL CHARTS

## Applicability

**175.09.1** (1) The specifications in this Subpart apply to all charts developed after 19 November 2009.

(2) An AIS provider must ensure that all aeronautical charts published in accordance with this Part and bearing the aeronautical information date of 19 November 2009 or later conform to the standards relevant to the particular chart.

## Availability

**175.09.2** An AIS provider must make available all information and charts relating to the territory of Namibia and ensure that such information and charts comply with the standards set out in Document NAM-CATS-AIS.

## General specifications for charts

**175.09.3** An AIS provider must ensure that each chart provides relevant, appropriate and accurate operational information and that the specifications comply with the standards set out in Document NAM-CATS-AIS.

## **ICAO charts**

175.09.4 An AIS provider must ensure that the following aeronautical charts comply with the standards set out in Document NAM-CATS-AIS -

- (a) Aerodrome Obstacle Chart– ICAO Type A (Operating limitations);
- (b) Aerodrome Obstacle Chart– ICAO Type B;
- (c) Aerodrome terrain and obstacle chart ICAO (Electronic);
- (d) Precision Approach Terrain Chart ICAO;
- (e) En-route Chart ICAO;
- (f) Area Chart ICAO;
- (g) Standard Departure Chart Instrument (SID) ICAO;
- (h) Standard Arrival Chart Instrument (STAR) ICAO;
- (i) Instrument Approach Chart ICAO;
- (j) Visual Approach Chart ICAO;
- (k) Aerodrome/Heliport Chart ICAO;
- (l) Aerodrome Ground Movement Chart ICAO;
- (m) Aircraft Parking/Docking Chart ICAO;
- (n) World Aeronautical Chart ICAO 1: 1 000 000;
- (o) Aeronautical Chart ICAO 1: 500 000;
- (p) Aeronautical Navigation Chart ICAO Small Scale;
- (q) Plotting Chart ICAO;
- (r) Electronic Aeronautical Chart Display ICAO;
- (s) ATC Surveillance Minimum Altitude Chart ICAO.

## **Insertion of Part 179 in Regulations**

11. The Regulations are amended by the insertion after Part 175 of the following Part:

# "PART 179 AIR NAVIGATION SERVICES: SEARCH AND RESCUE SERVICES

# LIST OF REGULATIONS

# **SUBPART 1: GENERAL**

- 179.01.2 Applicability
- 179.01.3 Restrictions on provision of search and rescue service

## SUBPART 2: SEARCH AND RESCUE ORGANISATION

- 179.02.1 Search and rescue coordinating agency
- 179.02.2 Provision of search and rescue services
- 179.02.3 Establishment of Namibian search and rescue region
- 179.02.4 Establishment of Rescue coordination centre and rescue sub centres
- 179.02.5 Search and rescue communication
- 179.02.6 Search and rescue units
- 179.02.7 Search and rescue equipment
- 179.02.8 Register of search and rescue units and other SAR service providers

# SUBPART 3: REQUIREMENTS TO BE COMPILED WITH BY SAR COORDINATING AGENCY

- 179.03.1 Search and rescue operations manual
- 179.03.2 Personnel and requirements
- 179.03.3 Co-ordination requirements
- 179.03.4 Standards for provision of search and rescue services
- 179.03.5 Notification of search and rescue facility status
- 179.03.6 Safety management system
- 179.03.7 Obligation to provide assistance

# **SUBPART 4: COOPERATION**

- 179.04.1 Cooperation with other States
- 179.04.2 Entry into Namibian territory by other States parties
- 179.04.3 Cooperation with other services
- 179.04.4 Dissemination of information

# SUBPART 5: PREPARATORY MEASURES

- 179.05.1 Preparatory information
- 179.05.2 Search and rescue plan of operation
- 179.05.3 Search and rescue units
- 179.05.4 Training and exercises
- 179.05.5 Wreckage

# **SUBPART 6: OPERATING PROCEDURES**

- 179.06.1 Information concerning emergencies
- 179.06.2 Procedures for rescue coordination centre during emergency phases
- 179.06.3 Initiation of search and rescue action in respect of aircraft whose position is unknown
- 179.06.4 Procedures where responsibility for operations extends to two or more rescue coordination centres

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179.06.5	Passing of information to aircraft in respect of which emergency phase has been declared
179.06.6	Procedures where responsibility for operations extends to two or more neighbouring
	States
179.06.7	Procedures for authorities in field
179.06.8	Search and rescue frequencies
179.06.9	Procedures for rescue coordination centre: termination and suspension of operations
179.06.10	Procedures at scene of accident
179.06.11	Procedures for pilot-in-command intercepting distress transmission

# SUBPART 7: SEARCH AND RESCUE SIGNALS

179.07.1	General requirements
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- 179.07.2Signals with surface craft
- 179.07.3 Ground-air visual signal code
- 179.07.4 Air-ground visual signals

# SUBPART 8: MAINTENANCE OF RECORDS, APPRAISALS AND INFORMATION SHARING

179.08.1	Records to be maintained
179.08.2	Documents to be held by SAR coordinating agency
179.08.3	Document and data control process
179.08.4	Search and rescue event: records and reports

### SUBPART 1 GENERAL

# **Definitions for this Part**

**179.01.1** (1) Definitions pertaining to this Part are contained in Document NAM-CATS-SAR.

(2) In this Part, -

"COSPAS-SARSAT" refers to a satellite-based search and rescue (SAR) distress alert detection and information distribution system, established and operated by Canada, France, the United States and Russia; and

"search and rescue organisation" means the composite organisation of persons and entities that include the SAR coordinating agency, search and rescue units and all other public governmental or private bodies or institutions, including voluntary organisations, that individually or collectively are involved in one way or another in the provision of search and rescue services in Namibia.

# Applicability

179.01.2 This Part -

- (a) prescribes regulations and procedures governing the provision of search and rescue (SAR) services in the Namibian search and rescue region (SRR);
- (b) applies to -
  - (i) all aircraft operating within the Namibia search and rescue region including areas over the high seas to which Namibia has accepted responsibility under the regional air navigation plan, and requiring search and rescue services;

- (ii) each person employed by, in the service of, or performing functions on behalf of, the SAR coordinating agency, a SAR rescue coordination centre, a rescue coordination sub-centre, and a search and rescue unit;
- (iii) all pilots-in-command who intercept a distress transmission or who observe another person, aircraft or a surface craft in distress;
- (iv) each owner, operator or pilot-in-command of an aircraft that has been requested by the SAR coordinating agency to assist in search and rescue activities;
- (v) SAR authorities of neighbouring States who wish their search and rescue units to enter the territory of Namibia for search and rescue purposes; and
- (c) sets out certain administrative rules applying to the Executive Director in the administration of this Part.

## Restrictions on provision of search and rescue service

**179.01.3** A person may not provide an aeronautical search and rescue service in Namibia unless that person is -

- (a) the SAR coordinating agency designated under this Part;
- (b) acting for or on behalf of a search and rescue coordination centre, rescue coordination sub-centre, or a search and rescue unit established in terms of this Part; or
- (c) acting pursuant to regulation 179.03.7,

and provides that service in compliance with the provisions of this Part.

## SUBPART 2 SEARCH AND RESCUE ORGANISATION

#### Search and rescue coordinating agency

**179.02.1** (1) There is established an agency known as the Search and Rescue (SAR) coordinating agency whose main objective is to ensure a coordinated and effective aeronautical search and rescue service within Namibia.

(2) The SAR coordinating agency acts as the responsible authority for the purposes of Annex 12 to the Chicago Convention, and the International Convention on Maritime Search and Rescue adopted on 12 April 1979 by the Maritime and Safety Committee of the International Maritime Organisation.

(3) The SAR coordinating agency, which is responsible for the coordination and operational functions required for aeronautical search and rescue services in Namibia, consists of representatives from such government, voluntary and private institutions as the Executive Director may determine including representative from the following:

- (a) the Ministry;
- (b) the Authority;

- (c) the Namibian Defence Force;
- (d) the Namibian Police; and
- (e) the Namibia Ports Authority.

(4) The head of the Air Navigation Services referred to in section 49(2) of the Act is the chairperson of the SAR coordinating agency.

(5) The designation to provide search and rescue service under subregulation (1) is subject to compliance with the relevant requirements prescribed in this Part and in Part 170, associated standards and any other conditions as may be specified or notified by the Executive Director.

## Provision of search and rescue services

**179.02.2** (1) The SAR coordinating agency, either acting individually, or in cooperation with another State, is responsible to the Executive Director for the establishment and prompt provision of search and rescue services within the Namibian search and rescue region, including portions of the high seas where Namibia has accepted the responsibility to provide search and rescue services on the basis of regional air navigation agreements.

(2) The SAR coordinating agency has the authority to call for the collaboration and support of other State resources during search and rescue operations.

(3) The Minister may conclude agreements concerning the provision of assistance with -

- (a) local and regional government authorities;
- (b) suitable private agencies or persons; or
- (c) search and rescue authorities of other States,

for the purpose of search and rescue operations.

(4) The SAR coordinating agency and any public authorities, private agencies or persons providing search and rescue services within the territory of Namibia or areas over the high seas for which Namibia has accepted responsibility to provide search and rescue services must provide the services in accordance with the provisions of this Part.

(5) The SAR coordinating agency must provide search and rescue services in accordance with requirements of this Part and any standards set out in Document NAM-CATS-SAR.

(6) The costs, connected with the conduct of a search and rescue operation, must not be allowed to interfere with its prompt and effective execution.

# Establishment of Namibian search and rescue region

**179.02.3** (1) The Namibian SAR region, as determined by the Executive Director, and published in the *Gazette* and in the Namibian Aeronautical Information Publication (AIP) must -

- (a) be coincident to the Windhoek Flight Information Region (AIP); and
- (b) cover the Namibia maritime search and rescue region, including the high seas, as laid down by the ICAO and the International Maritime Organisation.

(2) The Executive Director must establish the Namibian search and rescue region with the objective of ensuring the provision of adequate communication infrastructure, efficient distress alert routing and proper operational coordination to effectively support search and rescue services in Namibia.

(3) The Executive Director must determine the delineation of the Namibia search and rescue regions on the basis of technical and operational considerations and that may not necessarily be related to the territorial boundaries of Namibia.

(4) The Executive Director must establish the Namibian search and rescue region so as to comprise -

- (a) the airspace, and land and sea areas contained within the Windhoek Flight Information Region (FIR), except where agreements have been made with another State for search and rescue services to be provided by a neighbouring State; and
- (b) additional airspace volumes and land and sea areas within the territorial boundaries of Namibia as may be determined by the Executive Director.

## Establishment of rescue coordination centre and rescue sub-centres

179.02.4 (1) The SAR coordinating agency must -

- (a) establish a rescue coordination centre and as appropriate, a sufficient number of rescue sub-centres to provide search and rescue services within the Namibian search and rescue region;
- (b) following the establishment of a rescue coordination centre and appropriate rescue sub-centres, publish in the AIP, information regarding such establishment; and
- (c) ensure that search and rescue services are available on a 24-hour basis.

(2) The rescue coordination centre and, as appropriate, rescue sub-centres, must be established in accordance with the standards set out in Document NAM-CATS-SAR.

## Search and rescue communication

**179.02.5** (1) The SAR coordinating agency must ensure that the rescue coordination centre and, as necessary, the rescue sub-centres have means of rapid and reliable two-way communications with the relevant units, centres and agencies involved in search and rescue operations.

(2) The communication systems and procedures for the rescue coordination centre and the rescue sub-centres must be established in accordance with the standards set out in Document NAM-CATS-SAR.

## Search and rescue units

**179.02.6** (1) The SAR coordinating agency must designate as search and rescue units, elements of public or private persons and entities, suitably located and equipped for search and rescue operations.

(2) The SAR coordinating agency must designate as part of the search and rescue plan of operation, elements of public or private persons or entities, that do not qualify as search and rescue units but are able to participate in search and rescue operations.

(3) The establishment of search and rescue units must be in accordance with the standards set out in Document NAM-CATS-SAR.

# Search and rescue equipment

**179.02.7** (1) The SAR coordinating agency must ensure that designated search and rescue units are provided with, or have made arrangements to access the necessary equipment for locating promptly, and for providing adequate assistance at the scene of an accident.

(2) Each aircraft involved in search and rescue operations must have necessary equipment for communication on the aeronautical distress, on-scene and other frequencies and devices for homing on distress frequencies.

(3) The equipment to be provided to search and rescue units and to aircraft must be as set out in Document NAM-CATS-SAR.

## Register of search and rescue units and other SAR service providers

**179.02.8** (1) The SAR coordinating agency must keep a register of all the designated search and rescue units and other rescue service providers which may from time to time be tasked to assist in search and rescue operations.

(2) The register referred to in subregulation(1) must contain relevant particulars of the units or organisations including -

- (a) full name;
- (b) address; and
- (c) the type or types of search and rescue service to be provided;

(3) The SAR coordinating agency must keep or cause to be kept the register in a safe place at the rescue coordination centre and at rescue sub-centres.

# SUBPART 3 REQUIREMENTS TO BE COMPLIED WITH BY SAR COORDINATING AGENCY

## Search and rescue operations manual

**179.03.1** (1) The SAR coordinating agency must, as part of its manual of procedures required under Part 170, develop and maintain a search and rescue operations manual covering the operations of the rescue coordination centre and associated rescue sub-centres.

(2) The search and rescue operations manual must contain a description of procedures and practices for the provision of search and rescue services within Namibia, including -

- (a) organisational structure, including management structure, search and rescue resources and provisions for domestic, military and foreign aircraft during search and rescue operations;
- (b) communications, including interactions and responses to emergency signalling devices such as COSPAS-SARSAT and Inmarsat-E EPIRB, inter-unit and interagency communications and coordination, and communications infrastructure and procedures;

- (c) awareness and initial actions, including search and rescue stages, emergency phases, sequence of search and rescue events, and information gathering and assessment;
- (d) search planning and evaluation, including search planning steps, search stages, and factors affecting search and rescue response;
- (e) search techniques and operations, including search area coverage, search patterns, electronic searches and search and rescue crew briefing and de-briefing;
- (f) rescue planning and operations, including preparation, medical assistance, rescue on land or at sea, and supply dropping;
- (g) conclusion of search and rescue operations, including suspension of search, resumption of search, records and reports, and performance review;
- (h) training and exercises, including national training framework, training of search and rescue units, and liaison visits; and
- (i) emergency assistance other than search and rescue, where requested or required.

## **Personnel requirements**

**179.03.2** (1) The SAR coordinating agency must, in addition to the personnel requirements specified in Part 170, ensure that -

- (a) the planning of search and rescue services is properly coordinated and all the components of the SAR organisation comply with the requirements specified in the search and rescue operations manual;
- (b) there is sufficient and qualified staff to operate the rescue coordination centre or rescue coordination sub-centres during normal operations, and during search and rescue events.
- (2) The SAR coordinating agency must -
- (a) ensure that all rescue coordination centre and rescue sub-centres personnel are competent and hold appropriate qualifications to perform the duties which they are assigned;
- (b) ensure that personnel are appropriately trained and assessed through a formal process by a person who is qualified;
- (c) give each of the rescue coordination centre and rescue sub-centre personnel a certificate that -
  - (i) includes the names of the personnel;
  - (ii) describes the functions that the personnel is authorised to perform; and
  - (iii) states the period during which the certificate is effective and valid;
- (d) develop a comprehensive training programme and periodic training plans to ensure that each member of the rescue coordination centre and rescue sub-centres personnel maintain the appropriate level of qualification;

- (e) maintain training records for all search and rescue personnel in accordance with Part 170;
- (f) establish a process to confirm that all personnel from other agencies that will be engaged to respond to a search and rescue event are competent and hold appropriate qualifications to perform the duties which they are assigned, except that responsibility for initial and recurrent training and qualification of agency personnel remains with the SAR agency;
- (g) establish arrangements that define the person responsible and the process to be followed to ensure an adequate number of suitably trained and qualified staff are available in respect of search and rescue services;
- (h) define the method by which staffing levels are determined in relation to the search and rescue services to be provided; and
- (i) establish arrangements that define the management responsibilities and process for ensuring adequate staff supervision, and such arrangements must include the mechanisms that ensure only trained and competent staff undertake the provision of search and rescue services.

(3) Where rescue coordination centre and rescue sub-centres staff or other search and rescue-related personnel are not permanently employed in search and rescue activities, but are seconded from other government institutions or agencies as required from time to time, the SAR coordinating agency must ensure that the seconded staff are appropriately qualified, and that appropriate recurrent training is provided on a regular basis to maintain competence.

## **Co-ordination requirements**

**179.03.3** (1) A SAR coordinating agency must establish systems and procedures for ensuring effective co-ordination between itself and the following entities:

- (a) the Authority's safety division;
- (b) SAR coordinating agencies of other States, rescue coordination centres and subcentres and search and rescue units of other States, if applicable;
- (c) maritime rescue coordination centres;
- (d) aeronautical telecommunication service providers;
- (e) air traffic service providers;
- (f) the A-MET service;
- (g) aeronautical information service providers;
- (h) aircraft operators;
- (i) aerodrome operators;
- (j) SAR service providers and authorities in neighbouring States;
- (k) the Namibian Defence Force;

(l) the Namibian Police;

- (m) disaster management entities established by the Disaster Risk Management Act, 2012 (Act No. 10 of 2012) and other emergency response units of Namibia; and
- (n) the COSPAS-SARSAT mission control centre.

(2) The SAR coordinating agency must ensure that each rescue sub-centre has means of rapid and reliable two-way communication with -

- (a) the rescue coordination centre;
- (b) adjacent rescue sub-centres;
- (c) a meteorological office or meteorological watch office;
- (d) search and rescue units; and
- (e) alerting posts.

## Standards for provision of search and rescue services

**179.03.4** (1) The SAR coordinating agency must provide services in full compliance with the regulations prescribed in this Part and any standards set out in Document NAM-CATS-SAR.

(2) The SAR coordinating agency must provide services in full compliance with the applicable -

- (a) standards set out by the International Aeronautical and Maritime Search and Rescue Manual, as varied by the AIP; and
- (b) procedures and practices published in the SAR coordinating agency's manual of procedures.

(3) The SAR coordinating agency must, in addition ensure that the search and rescue service that it provides, meets the -

- (a) requirements prescribed in Part 170;
- (b) requirements prescribed in this Part;
- (c) requirements of any other Parts referred to in this Part;
- (d) provisions set out or referred to in ICAO Annex 12;
- (e) standards set out or referred to in any relevant ICAO Documents;
- (f) applicable standards set out in Document NAM-CATS-SAR; and
- (f) provisions of any other relevant Authority's documents.
- (4) Despite subregulations (1), (2) and (3), the SAR coordinating agency may deviate from the standards if an emergency or other circumstance, arises that makes the deviation necessary in the interests of aviation safety.

(5) The SAR coordinating agency must, as soon as is possible, notify the Executive Director of the deviation and how long it is likely to last.

## Notification of search and rescue facility status

**179.03.5** (1) The SAR coordinating agency must establish procedures to notify the users of the search and rescue services, about relevant operational information of any change in the operational status of the search and rescue facilities.

(2) The procedures required by subregulation (1) must be notified through the Aeronautical Information Publication.

#### Safety management system

179.03.6 The SAR coordinating agency must ensure that those -

- (a) search and rescue services that come under the authority of an ATS provider; or
- (b) aspects of search and rescue services which would have direct implications on air traffic services,

are coordinated with the ATS provider concerned for inclusion in the scope of their safety management systems.

## **Obligation to provide assistance**

**179.03.7** (1) Any person involved in the provision of search and rescue services must, in providing assistance to aircraft and survivors of aircraft accidents, do so to all aircraft and persons involved regardless of their nationality and status.

(2) The owner, operator or pilot-in-command of an aircraft must conduct search and rescue operations required by the SAR coordinating agency whenever necessary, if the condition of the aircraft so allows.

(3) Each owner, operator or pilot-in-command of an aircraft that has been requested by the SAR coordinating agency to assist in search and rescue activities need not obtain formal authorisation from the Executive Director under this Part in order to assist in search and rescue activities.

## SUBPART 4 COOPERATION

## **Cooperation with other States**

**179.04.1** (1) The SAR coordinating agency must, in conjunction with the Executive Director -

- (a) coordinate its search and rescue organisation with those of neighbouring States;
- (b) as necessary, coordinate its search and rescue operations with those of neighbouring States, when these operations are proximate to adjacent search and rescue regions;
- (c) as far as practicable, develop common search and rescue plans and procedures to facilitate coordination of search and rescue operations with those of neighbouring States;

- (d) enter into agreements with other States to strengthen search and rescue cooperation and coordination;
- (e) make arrangements for joint training exercise to promote search and rescue efficiency; and
- (f) make arrangements for periodic liaison visits by its rescue coordination centre and rescue sub-centres personnel to centres of neighbouring or other States.

(2) The SAR coordinating agency must authorise its rescue coordination centre to undertake its coordinative roles with other States in accordance with the standards set out in Document NAM-CATS-SAR.

(3) The coordination of search and rescue services, with other States including the grant of entry permits, assistance, arrangement for liaison visits, customs and immigration must be in accordance with the requirements set out in Document NAM-ATS- SAR.

## Entry into Namibian territory by other States parties

**179.04.2** (1) The SAR coordinating agency must coordinate with relevant government authorities or institutions in order to permit entry into the Namibian territory, search and rescue units of other States for the purpose of search and rescue.

(2) Other State parties to the Chicago Convention who wish their search and rescue units to enter the territory of Namibia for search and rescue purposes, must transmit a request, giving full details of the projected mission and the need for it, to the Executive Director.

(3) The coordination of entry into Namibian territory by search and rescue units of other States must be in accordance with requirements set out in Document NAM-CATS-SAR.

## **Cooperation with other services**

**179.04.3** (1) The SAR coordinating agency, after consultation with the Executive Director, must -

- (a) arrange for all aircraft, vessels and local services and facilities which do not form part of the SAR organisation to cooperate fully with the search and rescue organisation for purposes of assistance to survivors of accidents;
- (b) ensure close coordination with the directorate responsible for maritime affairs in the Ministry to provide for the most effective and efficient search and rescue services;
- (c) ensure cooperation between its rescue coordination centre and the Directorate;
- (d) cooperate with those responsible for the care of those who have suffered some injury resulting from the accident;
- (e) when practicable, ensure that rescue units are accompanied by staff members of the Directorate; and
- (f) designate and publish in the AIP, a search and rescue point of contact for the receipt of COSPAS-SARSAT distress data.

(2) The SAR coordinating agency must undertake the activities described in subregulation (1) in accordance with requirements set out in Document NAM-CATS-SAR.

## **Dissemination of information**

179.04.4 The SAR coordinating agency must as described in Document NAM-CATS-SAR -

- (a) publish in the AIP, arrangements and information necessary for the entry into Namibia, of search and rescue units of other States;
- (b) make available, information regarding the search and rescue plans of operation;
- (c) disseminate, where considered desirable, information to the general public and to emergency response authorities regarding actions to be taken when there is reason to believe that an aircraft's emergency situation may become dangerous or require a general emergency response.

## SUBPART 5 PREPARATORY MEASURES

## **Preparatory information**

**179.05.1** (1) The SAR coordinating agency must in accordance with procedures set out in Document NAM-CATS-SAR -

- (a) make readily available, at all times, up to-date information in respect of its search and rescue region, search and rescue units, rescue coordination centre, rescue subcentres and alerting posts, and air traffic services units;
- (b) ensure that the rescue coordination centre have readily available all other information of interest to search and rescue; and
- (c) in cooperation with other States, and in cooperation with the directorate of maritime affairs in the Ministry arrange communication links with automated mutual-assistance vessel rescue system (AMVERS) or regional maritime vessel reporting systems to facilitate search and rescue operations at sea.

(2) The rescue coordination centre must coordinate with the marine search and rescue units to have ready access to information regarding the positions, course and speed of a maritime vessel at sea that may be able to provide assistance to aircraft in distress and information on how to contact such vessel.

## Search and rescue plan of operation

**179.05.2** (1) The SAR coordinating agency must prepare detailed plans of operation for the conduct of search and rescue operations within the search and rescue region as set out in the NAM-CATS- SAR.

(2) The search and rescue plans of operation must contain details regarding actions to be taken by those persons engaged in search and rescue, as set out in Document NAM-CATS-SAR.

(3) Search and rescue plans of operation must be integrated with aerodrome emergency plans and air operator's emergency response plans to provide for rescue services in the vicinity of aerodromes and in water areas.

(4) To facilitate the implementation of the search and rescue plan, the SAR coordinating agency must prepare and keep updated, a search and rescue manual containing the necessary procedures for search and rescue operations and matters connected therewith.

## Search and rescue units

**179.05.3** The SAR coordinating agency must ensure that each search and rescue unit is cognisant and prepared for the search and rescue operations as set out in Document NAM-CATS-SAR.

## **Training and exercises**

**179.05.4** The SAR coordinating agency must provide for regular training of their search and rescue personnel and arrange appropriate search and rescue exercises as set out in Document NAM-CATS-SAR.

# Wreckage

**179.05.5** The SAR coordinating agency, in coordination with the Directorate and other concerned authorities, must ensure that wreckage resulting from aircraft accidents -

- (a) within Namibia territory; or
- (b) in the case of accidents in areas of the sea, within the search and rescue region for which it is responsible,

is removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent search and rescue operations.

## SUBPART 6 OPERATING PROCEDURES

## Information concerning emergencies and alerting services

**179.06.1** (1) Any person or any component of the search and rescue organisation having reason to believe that an aircraft is in a state of emergency must immediately alert and give all available information to the rescue coordination centre.

(2) The rescue coordination centre must, immediately upon receipt of information concerning aircraft in emergency, evaluate such information and assess the extent of the operation required.

(3) When information and alerts concerning aircraft in distress is received from other sources than ATS providers, the rescue coordination centre must determine to which alerts or emergency phase the situation corresponds and must apply the procedures applicable to that phase as outlined in 179.06.2.

## Procedures for rescue coordination centre during emergency phases

**179.06.2** (1) The procedures for a rescue coordination centre during the three emergency phases and the order of the actions are as set out in Document NAM-CATS-SAR.

(2) If an emergency phase is declared in respect of an aircraft whose position is unknown and may be in one of two or more search and rescue regions, the initiation of the search and rescue actions are as set out in Document NAM-CATS-SAR.

# Initiation of search and rescue action in respect of aircraft whose position is unknown

**179.06.3** If an emergency phase is declared in respect of an aircraft whose position is unknown and may be in one of two or more search and rescue regions, the rescue coordination centre

# Procedures where responsibility for operations extends to two or more rescue coordination centres

**179.06.4** Where the conduct of operations over the entire search and rescue region is the responsibility of more than one rescue coordination centre, each involved rescue coordination centre must take action in accordance with the relevant plan of operations when so requested by the rescue coordination centre of the region.

## Passing of information to aircraft in respect of which emergency phase has been declared

**179.06.5** When applicable, the rescue coordination centre responsible for search and rescue action must forward to an ATS provider, information of the search and rescue action initiated, in order that such information can be passed to the aircraft.

## Procedures where responsibility for operations extends to two or more neighbouring States

**179.06.6** Where the conduct of operations over the Namibian search and rescue region involves search and rescue centres of other States, those search and rescue centres must take action in accordance with their relevant plan of operations when so requested by the rescue coordination centre of the region.

## **Procedures for authorities in field**

**179.06.7** The relevant SAR authority immediately directing the conduct of search and rescue operations in the field or any part thereof must -

- (a) give instructions to the units under its direction and inform the rescue coordination centre of such instructions; and
- (b) keep the rescue coordination centre informed of any developments.

## Search and rescue frequencies

**179.06.8** The frequencies 3 023 kHz and 5 680 kHz must be used where the use of high frequencies is required for search and rescue scene of action coordination purposes, and the ICAO Handbook on Radio Frequency Spectrum Requirements for Civil Aviation(Doc 9718) must be used as a reference.

## Procedures for rescue coordination centre: termination and suspension of operations

**179.06.9** The procedure for rescue coordination centre for termination and suspension of operation is as set out in Document NAM-CATS-SAR.

## Procedures at scene of accident

**179.06.10** The procedures to be followed by the rescue coordination centre or rescue sub-centre, the pilot-in-command and search and rescue aircraft when at the scene of the accident must be as set out in Document NAM-CATS-SAR.

## Procedures for pilot-in-command intercepting distress transmission

**179.06.11** If a pilot-in-command of an aircraft intercepts a distress transmission, the pilot-in-command must follow the procedure for intercepting a distress transmission set out in

Document NAM-CATS-SAR.

# SUBPART 7 SEARCH AND RESCUE SIGNALS

## **General requirements**

**179.07.1** (1) The air-to-surface and surface-to-air visual signals set out in Document NAM-CATS-SAR must be used for the purpose of search and rescue and when used, must have the meaning indicated therein.

(2) The signals must be used only for the purpose indicated and other signals likely to be confused may not be used with them.

(3) Upon observing any of the signals, the pilot-in-command of an aircraft must take such action as may be required by the interpretation of the signal given.

## Signals with surface craft

**179.07.2** The signals to be used to indicate that the aircraft wishes to direct a surface craft towards an aircraft or a surface craft in distress must be as set out in Document NAM-CATS-SAR.

## Ground-air visual signal code

**179.07.3** (1) The ground-air visual signals to be used by survivors and by rescue units must be as set out in Document NAM-CATS-SAR.

(2) Survivors and rescue units may use any available means to form the visual signals to attract attention.

## Air-ground visual signals

**179.07.4** The signals to be used by aircraft to indicate that they have understood the ground signals must be as set out in Document NAM-CATS-SAR.

## **SUBPART 8**

# MAINTENANCE OF RECORDS, APPRAISALS AND INFORMATION SHARING

## **Records to be maintained**

**179.08.1** (1) The rescue coordination centre must keep a record of the operational efficiency of level and prepare appraisals of the actual search and rescue operations in the Namibian search and rescue region.

(2) The SAR coordinating agency must prepare appraisals of actual search and rescue operations within the Namibian search and rescue region, and those appraisals must comprise -

- (a) any pertinent remarks on the procedures used and on the emergency and survival equipment; and
- (b) any suggestions for improvement of the procedures and equipment referred to in paragraph (a).
- (3) The SAR coordinating agency must submit those appraisals which are likely to be of

interest to other States to the Executive Director who must forward the same to ICAO for information and dissemination as appropriate.

# Documents to be held by SAR coordinating agency

**179.08.2** (1) The SAR coordinating agency must hold and maintain certain documentation essential to the effective provision of search and rescue services.

(2) The documents to be held and maintained by the SAR coordinating agency must be those set out in Document NAM-CATS-SAR.

# Document and data control process

**179.08.3** (1) The SAR coordinating agency must establish a document control system which covers the authorisation, standardisation, publication, distribution and amendment of all documentation issued in connection with the provision of search and rescue services.

(2) The document control process must be as prescribed in Part 170.

## Search and rescue event: records and reports

**179.08.4** (1) The SAR coordinating agency must ensure that all actions taken in relation to a search and rescue event are recorded in a search and rescue log maintained in the rescue coordination centre managing the search and rescue event.

- (2) The records referred to in subregulation (1) must include but are not limited to -
- (a) calls, documents, other correspondences and communications;
- (b) times of termination of the search and rescue event;
- (c) time of suspending the search and rescue event if applicable;
- (d) relevant records of aircraft;
- (e) applicable charts; and
- (f) any records relating to the search and rescue actions.

(3) The records referred to (1) must be maintained in the manner set out in Document NAM-CATS-SAR.