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PART 174

AIR NAVIGATION SERVICES: AVIATION METEOROLOGICAL SERVICES

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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 NAMCATS-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.

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(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.

Applicability

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;

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- (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 NAMCATS-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;

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- (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 NAMCATS-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 Part 170 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.

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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.

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(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

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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).

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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.

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(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

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- (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.

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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.

(1) 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.

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**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.

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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-CATSMET.

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,

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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.