

OVERSEAS TERRITORIES AVIATION REQUIREMENTS (OTARs)

Part 174

METEOROLOGICAL SERVICES FOR AVIATION

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This Issue takes account of ICAO Annex 3 at Amendment 79, twentieth edition – November 2021.

The definitive version of OTARs is that on the ASSI website <u>www.airsafety.aero</u> which should be viewed to establish the latest issue of each Part.

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Revisions

OTAR Issue	Subject
First issue	Released for gazetting
Issue 2	Fundamental revision to rationalise and simplify text and presentation.
	Incorporates ICAO amendments 77A & 77B.
	New Subpart B is introduced with consequent revision of following Subparts.
	Clarification of provision, maintenance and calibration of all meteorology equipment.
	Incorporation of staff qualifications, training and competence which shall meet World Meteorological Organisation standards (<i>Incorporates OTAC 174-2</i>).
	Clarification of circumstances for contracts or Letters of Agreement (LoA).
	Amplification of MET office and facilities requirements.
Issue 3	Amendments to Meteorological Authority regulations and Service Definition Documents (SDD).

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Subpart A – General

174.1 Purpose

- (a) The Air Navigation (Overseas Territories) Order ("the Order") places responsibility on the Governor, as the Territory's meteorological authority, for ensuring that appropriate arrangements are made for the provision and oversight of meteorological services for international air navigation within the Territory.
- (b) This Overseas Territories Aviation Requirement (OTAR) Part details the requirements on those parties charged with discharging the Governor's responsibilities concerning arrangements for the provision of meteorological information for international air navigation within the Territory to ensure compliance with ICAO Annex 3 (Meteorological Services for International Air Navigation). It describes the responsibilities of the meteorological authority, the meteorological service providers, Aeronautical Meteorological (Met) Stations and the designated regulator.
- (c) These requirements are not in themselves Law. Failure to comply may not constitute an offence. However, the Requirements repeat or reproduce provisions of the Order. Therefore, failure to comply with these Requirements may:
 - (1) constitute a breach of the Order; and
 - (2) result in proceedings for breaches of the Order
- (d) Other OTAR Parts may impinge upon activities conducted under this Part. In particular, Part 1 contains definitions which apply, unless otherwise stated, to all Parts. A full list of OTAR Parts, a description of the legislative structure and the place of OTARs and Overseas Territory Aviation Circulars (OTACs) within it can be viewed on the ASSI website www.airsafety.aero.

174.3 Use of English

All documentation, written communications and data (electronic or otherwise) shall be provided in English.

174.5 Laws, requirements and procedures

The meteorological authority and meteorological service providers shall take reasonable care to ensure that all persons employed, engaged or contracted, are familiar with the appropriate sections of legislation, the OTAR, any applicable conditions imposed by the designated regulator and the procedures specified in the relevant safety assurance documentation and quality system.

174.7 Procedure compliance

Each person performing duties in relation to the provision of meteorological services for international air navigation shall comply with the applicable procedures specified in the appropriate manuals which authorises the operation.

174.9 Power to inspect

- (a) Any person authorised by the Governor shall be allowed access to the service provider's facilities (as appropriate).
- (b) The service provider shall ensure that any authorised person shall have access to any documentation relating to activities associated with the provision of meteorological services for international air navigation. The service provider shall be responsible for ensuring that, if requested to do so by an authorised person, documentation is produced within a reasonable period.
- (c) The service provider shall comply with any request by the Governor for a practical demonstration or test to verify compliance with the OTARs.

Note: Where meteorological service provision is provided by another Territory/State, oversight and inspection of service provision will be conducted as agreed between the Met Authority, designated regulator and service provider, and detailed in the applicable Formal Arrangements (eg contracts/LoAs/SDDs).

174.11 Definitions

The definitions specified in ICAO Annex 3 should be used when interpreting this document.

174.13 Applicability

The requirements of this OTAR Part apply to meteorological authorities, aeronautical meteorological stations, meteorological service providers and designated regulators.

Subpart B – Structure

174.25 Structure and responsibilities of meteorological service provision

(a) There are three roles in the provision of a meteorological service. In certain cases, the roles may be delivered by separate bodies or in combination. The permissible combinations are summarised in Table 174.1.

Meteorological authority	Designated Regulator	Meteorological Service provider(s)	
		Aerodrome Meteorological office	Aeronautical Meteorological station
\checkmark	\checkmark	×	×
\checkmark	×	\checkmark	\checkmark

Table 174.1 Permissible combined roles of the three bodies

(b) Each body or combination is responsible for their outputs summarised in Table 174.2.

Table 174.2 Responsibilities of each body

Body	Responsibility	Output
MET Authority	Definition of services to be provided and arrangement for oversight and regulation of services	Service Definition Document (SDD)
Designated Regulator	Regulation/oversight of MET service provision	Audit of Service Provider(s). Review of SDD. Publication of regulatory guidance material (OTAR/OTAC).
Meteorological Service Provider(s)	Provision of MET service as defined in SDD	Annex 3/OTAR compliant MET service

Subpart C – Meteorological Authority

174.51 Role of the meteorological authority

The meteorological authority arranges for the provision of meteorological services and for the oversight and (where applicable) regulation of the meteorological services.

174.53 Responsibilities of the meteorological authority

- (a) The meteorological authority shall set out the meteorological services to be provided within the Territory in accordance with ICAO Annex 3.
- (b) The meteorological authority shall set out in the SDD the services to be provided.
- (c) The name and contact details for the meteorological authority shall be published in the Territory's AIP.

174.55 Service Definition Document (SDD)

- (a) The meteorological authority shall produce a Service Definition Document (SDD).
- (b) Before producing the SDD, the meteorological authority shall consult users, including:

User Group	ICAO Annex 3	
Air Traffic Service provider	Chapter 2	
commercial and private pilots	Chanter 0	
commercial air operators	Chapter 9	
air traffic services	Chapter 10	
search and rescue organisations	Chapter 10	
other interested parties	As appropriate	

- (c) In addition to the users' opinions, the meteorological authority shall also consider the requirements of the ICAO Regional Air Navigation Agreement and Plan with regard to meteorological services and equipment for international air navigation in the Territory.
- (d) The meteorological authority shall formally consult users regularly in order to ensure that the meteorological services provided remain appropriate.
- (e) The SDD shall define:
 - (1) the services to be provided, and the means of delivery (face to face briefing; fax; paper; electronic etc); and
 - (2) the locations from, and hours during which they will be provided; and

- (3) the standards and criteria to be applied (ICAO Annex 3 at minimum), including, for example, the criteria for the production and distribution of Special Reports and post-Accident Reports; and
- (4) a Quality Management System (QMS) which shall be used by the service provider; and
- (5) the requirements for agreements or contracts between the meteorological service provider, air traffic services and other users where appropriate; and
- (6) the requirements for aircraft observations to be made by aircraft of its registry operating on international routes and for the recording and reporting of these observations; and
- (7) the requirements for the provision¹, maintenance and calibration of all meteorology equipment.
- (f) Where a user identifies a significant change in its circumstances, eg a new route or aircraft type for an aircraft operator, or a new ATS service for ATC, the user shall notify the meteorological authority as soon as practicable so that the change can be assessed for impact on the SDD.

174.57 Provision of meteorological services

- (a) Meteorological Services may be provided by:
 - (1) the Territory's own Meteorological Office; or
 - (2) another State's or Territory's Meteorological Office; or
 - (3) a commercial meteorological service provider, or

In the case of aeronautical meteorological observing services:

- (4) an aerodrome operator/ATS provider.
- (b) Table 174.4 sets out the service provision arrangements (scope of work) that is applicable depending on the provider type:

Table 174.4 Provider/Service Type table

Arrangement for	Contractual Basis		
Service provision	Service Provision method ²	Charged service	
Own Territory/State	Letter of Agreement	Contract	
Other Territory/State	(LoA)	Contract	
Commercial	As applicable	Contract	
Aerodrome operator/ATS provider	Contract or in-house provision.	Contract	

¹ Annex 14 Volume 1 contains the requirement for secondary power supply.

² This includes services where costs are shared between each party and cancel each other out.

(c) Any agreement or contract shall include the requirement for a QMS to be implemented by the Meteorological service provider in accordance with paragraph 174.105 of this OTAR Part.

Subpart D – Meteorological Service Provision

174.101 Role of the meteorological service provider

In accordance with paragraph 174.25(a) the meteorological service provider provides meteorological forecasting and/or observing services (as applicable).

174.103 Annex 3 compliance

- (a) The meteorological service provider shall adhere to the Standards and safety-related Recommended Practices of ICAO Annex 3.
- (b) Any agreement or contract between a meteorological service provider and third-party meteorological information supplier shall include the specific requirement for compliance with ICAO Annex 3 for:
 - (1) preparation, content and format of observations and/or reports; and
 - (2) preparation, content and format of forecasts and briefings; and
 - (3) the schedule for the issue and validity of reports and forecasts; and
 - (4) content, format and requirements for issue of (as appropriate):
 - (i) Operational Meteorological Information (OPMET);
 - (ii) Aerodrome Warnings;
 - (iii) Wind Shear Warnings (where these are required); and
 - (iv) the relay of advisory messages from Volcanic Ash Advisory Centres or Tropical Cyclone Advisory Centres; and
 - (5) provision of climatological information, as required; and
 - (6) the suitability and operation of any automatic weather reporting equipment and meteorological instrumentation sited at airports including documented procedures for calibration and maintenance of all meteorological equipment; and
 - (7) communications requirements and provision.

174.105 Quality Management System (QMS)

- (a) To meet the requirements of ICAO Annex 3, the meteorological service provider shall have a QMS acceptable to the Governor.
- (b) The QMS used may be that of the Aerodrome Certificate holder or a separate complementary system.
- (c) The QMS shall include the following elements:
 - staff qualifications, training and competence which shall meet World Meteorological Organisation (WMO) standards³; and

³ Details of the standards can be found in Volume 1 of the Technical Regulations WMO-49.

- (2) means to confirm that the service provided meets and continues to meet the requirements of this OTAR and the SDD; and
- (3) verification and validation procedures are in place for any meteorological information disseminated; and
- (4) procedures exist to ensure that the transmission of information is appropriate and timely; and
- (5) any meteorological information disseminated conforms to standard global message formats; and
- (6) a system of record-keeping that allows adequate storage of records and reliable traceability of all its activities, covering in particular all elements related to personnel training and competency.

174.107 Meteorological records

The service provider shall maintain records of observations and retain these without time limit. This data shall be made available to organisations undertaking research, investigation or analysis.

Subpart E – Regulation

174.151 Designated regulator

In accordance with paragraph 174.25(a) the Governor may designate a regulator to regulate and oversee the Territory's Met Service Provision. The regulator cannot be the service provider (entities fulfilling the role of Meteorological Authority (and designated regulator) are separate entities to the meteorological service providers).

174.153 Oversight of the service provider

- (a) The regulator shall conduct audits of aeronautical meteorological stations and aerodrome meteorological offices including any contracts/LoAs/SDDs with third parties against:
 - (1) the requirements of this OTAR Part; and
 - (2) the SARPs in ICAO Annex 3; and
 - (3) the MET Part of the relevant ICAO Air Navigation Plan, Volume I, Basic ANP; and
 - (4) the MET Part of the relevant ICAO Air Navigation Plan, Volume II, FASID; and
 - (5) the requirements of the SDD.

Note: Where the aerodrome meteorological office service is provided by another Territory/State, oversight of service provision will be conducted as agreed between the Met Authority, designated regulator and service provider, and detailed in the applicable Formal Arrangements (eg contracts/LoAs/SDDs).

- (b) The purpose of the audit is to ensure that:
 - (1) the service provider is meeting the requirements in this OTAR Part, ICAO Annex 3 and the SDD; and
 - (2) the service provider's QMS is functioning appropriately and in accordance with 174.105; and
 - (3) the requirements of any agreements between meteorological service provider, meteorological authority, air traffic services and other users (as required by the SDD) are appropriate and that the service provided meets the requirements.
- (c) The audit shall include the suitability of the instruments used in the provision of the meteorological service and shall ensure that they are of sufficient accuracy and calibrated appropriately.
- (d) The audit shall include the service provider's office(s) and facilities, including communications equipment are adequate and suitable and that alternative suitable means of communication in the event of the failure of the primary means are available.

(e) In most cases audits are conducted around every 12 months but may be increased or decreased based on performance/risk-based oversight principles.

174.155 Non-compliance

- (a) In the event that the audit reveals non-compliances in service provision, regulatory remedial action shall be taken. Deficiencies shall be brought to the attention of the service provider, the meteorological authority (if appropriate) and the method and timescales for rectification agreed by means of Corrective Action Plans (CAP).
- (b) Regulatory findings will be classified according to the risk that is presented by the non-conformity and its effect on safety.