

# OVERSEAS TERRITORIES AVIATION REQUIREMENTS (OTARs)

# Part 172 AIR TRAFFIC SERVICE ORGANISATION REQUIREMENTS

**Issue 10.00** 

Published by Air Safety Support International Ltd

First Issue published for information
Second Issue – released for gazetting
Third Issue
Fourth Issue
Fifth Issue
Sixth Issue
Seventh Issue
Eighth Issue
Ninth Issue
Tenth Issue

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.

April 2005

July 2005

May 2009

February 2007

January 2011 December 2013

August 2019 July 2021

December 2014

September 2023

This Issue takes account of ICAO Annex 11, fifteenth edition – July 2018.

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Air Safety Support International, The Portland Building, 25 High Street, Crawley, RH10 1BG, UK

## www.airsafety.aero

## **REVISIONS**

OTAR Issue	Subject
Issue 1	First issue published for information
Issue 2	Second issue released for gazetting, with minor amendment to introductory text. Additional requirements for MATS. Minor revisions to personnel licensing, meteorology. Additional information about AN(OT)O Art 90.
Issue 3	Change to 172.1 to clarify applicability where Territory is subject to AN(OT)O 1989. Minor textual revisions and additional requirements to align with ICAO Annex 11 at Amendment 44, including provision for recording of background communication.
Issue 4	Change of reference to AN(OT)O 2007. Inclusion of provision relating to human factors and minor editorial changes.
Issue 5	Change to 172.55(16) to include a requirement to obtain readback of clearances and safety related information.) Changes to 172.57 to standardise wording on SMS. Changes to 172.123 (b) so that contingency plans take into account the guidance material for contingency plans in <i>Attachment C</i> of ICAO Annex 11 and Doc 4444 2-4. Addition of 172.124 requiring a Runway Safety Programme.
Issue 6	General update. Standardise definitions. Inclusion of Annex 11 compliance statement. Addition of Subpart F covering AFIS requirements and Appendix A with categories of emergency.  Reference to Annex 10, 11 and 19 included.
Issue 7	This issue amends the requirements for aviation security with effect from 1 April 2015.
Issue 8.00	This is a fundamental review and reorganisation of the OTAR intended to remove repetition and improve grouping and logic of the contents. It also endeavours to clarify matters relating to AFISs and Officers. This amendment also standardises terminology.  Incorporates ICAO Annex 11, edition 15, July 2018.
Issue 9.00	General update. New Fatigue Limitation Appendices F and G. New Fatigue Risk Management System requirements for units that are able to demonstrate an acceptable standard of fatigue risk management. Inclusion of ATM security requirements as defined by ICAO Doc 9985. Additional requirements added to Subpart D and Appendix B including new watch log, security and, general MATS requirements. Revisions to encompass the requirement to conduct periodic safety reviews and the calculation of aerodrome and ATM capacity.
Issue 10.00	Incorporation of additional material and clarification of requirements relating to Aerodrome Flight Information Services (AFIS) and Air Traffic Control (ATC). Additional security, safety, and record requirements for AFIS. Additional training and competency requirements. Removal of Appendix G and additional considerations for secondary employment of ATCOs.

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## Subpart A - General

## 172.1 Purpose

- (a) This Part prescribes requirements governing:
  - (1) the provision of Air Traffic Services (ATS) within the sovereign airspace of the Territories; and
  - (2) the approval and operation of organisations providing ATS in the sovereign airspace of the Territories excluding those portions of airspace that is:
    - (i) within the flight information region administered by another International Civil Aviation Organization (ICAO) Contracting State in accordance with the terms of a Regional Air Navigation Agreement; or
    - (ii) the subject of a written agreement between an organisation responsible for the provision of ATS in adjacent airspace which delegates the provision of ATS to that organisation; and
  - (3) the operating standards for the provision of ATS.
- (b) These requirements are not, in themselves, Law. Failure to comply may not constitute an offence. However, the requirements reproduce many of the provisions of the Air Navigation (Overseas Territories) Order (AN(OT)O) (as amended) ("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; or
  - (3) result in the refusal of an application for renewal of an approval; or
  - (4) result in action to suspend or revoke an approval.
- (c) The Order details the legal obligations governing the approval of Air Traffic Control (ATC) and Aerodrome Flight Information Service (AFIS). Therefore, there is a provision in the Order which requires the Governor to publish Requirements to augment, amplify and detail more precisely the manner in which these obligations shall be met. The Requirements are the means by which the approved organisation will be able to satisfy the Governor as to the fulfilment of the obligations in respect of ATC and AFIS or the entitlement of the holder to hold and exercise the privileges of a certificate, licence or approval.
- (d) The issue of an approval indicates only that the holder is considered competent to secure the safe operation of ATS in accordance with the Manual of Air Traffic Services (MATS) Flight Information Service Manual (FISM) and, where applicable, the Airport Security Programme. The possession of an approval does not relieve the provider of ATC or AFIS from the responsibility to comply with the Order and any other legislation in force. Neither does it relieve them of their responsibility for oversight of any service provider contracted by them to meet the requirements imposed upon them.

- (e) Other OTAR Parts may impinge upon activities conducted under this OTAR. 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.
- (f) References to the Governor in this OTAR means the regulator designated by the Governor of the Territory to exercise his functions under the Order.

## 172.3 Use of English

All documentation, written communications and data (electronic or otherwise) for submission to the Governor in support of an application for an approval shall be provided in English.

#### 172.5 Laws, requirements and procedures

Each holder of an approval shall take reasonable care to ensure that all persons employed, engaged or contracted by the holder to perform ATC activities are familiar with the appropriate sections of legislation, the OTARs, any applicable conditions of the approval and the procedures specified in the approval holder's safety assurance documentation and Exposition and, where applicable, the Airport Security Programme.

## 172.7 Procedure compliance

Each person performing duties in relation to an approval shall comply with the applicable procedures specified in the appropriate Manuals and, where applicable, programme(s) which authorise the operation.

#### 172.9 Definitions

Except where stated, the definitions used throughout OTAR Part 172 are in accordance with those detailed in OTAR Part 1 and ICAO Annex 11.

In this Part:

**Area of responsibility** means the airspace and, in the case of an aerodrome, the manoeuvring area within which a particular operating position is responsible for the provision of an ATC or Aerodrome Flight Information Service (AFIS);

**ATS** means Air Traffic Control Services and/or Aerodrome Flight Information Services as applicable;

**AFIS** means an Aerodrome Flight Information Service.

**FISO** means a Flight Information Service Officer.

**AFISU** means any Aerodrome Flight Information Services Unit which is not an ATCU.

ATCU means any Air Traffic Control Unit which is not an AFIS Unit

ATSU means an Air Traffic Control or AFIS Unit.

**ICAO Doc 4444** means the ICAO document entitled Procedures for Air Navigation Services—Air Traffic Management;

**ICAO Doc 7030** means the ICAO document entitled Regional Supplementary Procedures;

ICAO Doc 9432 means the ICAO document entitled Manual of Radiotelephony;

**Operating position** means the work-station from which one or more Air Traffic Control Officers (ATCO) or Flight Information Service Officers (FISO) provide ATS within an allocated area or areas, of responsibility;

**Unit Training Plan** means the training plan to be carried out at a unit to enable validation examination for a specific rating;

**Validated** means authorised to provide a particular air traffic service at an aerodrome.

#### 172.11 Power to Inspect

- (a) Each holder of an approval shall ensure that any person authorised by the Governor is allowed access to the approval holder's facilities.
- (b) Each holder of an approval shall ensure that any person authorised by the Governor shall have access to any documentation relating to activities associated with the approval. The holder of an approval shall be responsible for ensuring that, if requested to do so by an authorised person, documentation is produced within a reasonable period of time.
- (c) Each holder of an approval shall ensure that any person authorised by the Governor can request practical demonstrations and tests to verify compliance to the OTARs.

## **Subpart B – Applicability and Compliance**

## 172.25 Applicability

This OTAR Part applies to ATS as follows:

- (a) Subparts A to F apply to Air Traffic Control Units (ATCU); and
- (b) Subparts A, B, C and E apply to AFIS Units (AFISU).

## 172.27 ICAO Compliance

- (a) The holder of an approval shall, where applicable, comply with this OTAR Part and the applicable parts of OTAR Part 178 if operating on an aerodrome applying an Airport Security Programme. The holder of an approval shall also comply with the relevant Annex 3, Annex 10 Volume 2, Annex 11 and Annex 19 Standards and Recommended Practices (SARPs) relating to ATS.
- (b) Any agreement or contract between a holder of an approval and any service provider or sub-contractor providing services to the approval holder shall include, as applicable, the specific requirement for compliance with ICAO Annex 10 Volume 2, Annex 11 and Annex 19 and, the relevant parts of OTAR Part 178 if operating on an aerodrome applying an Airport Security Programme.

## 172.29 ATS procedures and standards

- (a) Unless otherwise provided for in this OTAR Part or agreed by the Governor, ATS shall be provided and operated in accordance with ICAO Doc 4444, modified or amplified by ICAO Doc 7030 as applicable.
- (b) Detailed procedures to be employed by the ATS unit (ATSU) concerned, with any applicable limitations, shall be set out in the unit's Manual of Air Traffic Services (MATS) and the FISM.

## **Subpart C – Application and Approval Requirements**

## 172.51 Requirement for approval

- (a) No person shall provide a service which the Governor deems to be an ATS except under the authority of, and in accordance with the provisions of this OTAR Part.
- (b) Where an aerodrome is subject to the requirements of OTAR Part 178, the ATSU is subject to the requirements of that OTAR Part.

## 172.53 Application for approval

- (a) An applicant for the grant of an ATSU approval shall apply to the Governor in the manner required and at least 60 working days before the approval is required, supplying:
  - (1) the applicant's name and address; and
  - (2) the specific ATS to be provided; and
  - (3) the aerodrome location or airspace designation at, or within which, the service will be provided; and
  - (4) where applicable, the Airport Security Programme, and
  - (5) evidence that the requirements in paragraph (b) have been met; and
  - (6) such other particulars relating to the applicant and the intended service as may be required by the Governor; and
  - (7) the Exposition required by paragraph 172.61; or FISM required by paragraph 172.157 and
  - (8) payment of any applicable fee required by the appropriate requirements.
- (b) The applicant for an approval shall satisfy the Governor that:
  - the applicant and his/her staff have the necessary competence and experience to operate and maintain the services safely and, where applicable securely, and meet the responsibilities of paragraph 172.67; and
  - (2) the MATS prepared for the ATCU or the FISM prepared for the AFISU contains all of the relevant information; and
  - (3) the ATS facilities, services and equipment meet the required standards; and
  - (4) the ATS operating procedures ensure the safe, and where applicable secure, operations of aircraft and/or the safety of air navigation; and
  - (5) an acceptable Quality Management System (QMS) and Safety Management System (SMS) is in place at the ATSU; and

- (6) appropriate arrangements are in place for the provision of:
  - (i) the Aeronautical Information Service; and
  - (ii) the Meteorological Service; and
  - (iii) Air Traffic Services Engineering.
- (7) The appropriate ATM and aerodrome capacity assessment has been conducted in conjunction with the Aerodrome Certificate Holder to confirm:
  - (i) The declared capacity of the aerodrome.
  - (ii) Establish whether ATFM procedures are required.
  - (iii) The resources provided are sufficient to meet the declared capacity.

Note: See OTAC 172-15.

## 172.55 Issue of approval

An applicant may be granted an ATSU approval if the Governor is satisfied that:

- (a) the applicant meets the requirements of the relevant Subparts of this OTAR Part, and where applicable, the requirements of OTAR Part 178; and
- (b) the applicant, and the applicant's senior person or persons required by paragraph 172.71 are fit and proper persons; and
- (c) the granting of the approval is not contrary to the interests of aviation safety; and
- (d) the ATSU shall have been inspected, to the satisfaction of the Governor prior to issue of an approval.

## 172.57 Privileges of approval

- (a) An ATSU approval shall state:
  - the aerodrome or airspace at, or within which, the service may be provided; and
  - (2) the type of ATS which may be provided.
- (b) An approval may include such conditions as the Governor may consider appropriate.
- (c) The holder of an approval issued under this Subpart shall comply with the requirements of the relevant Subparts of this OTAR Part and provide the ATS in accordance with those requirements and with any conditions attached to the approval.

## 172.59 Duration of approval

- (a) An ATS approval remains in force until it is suspended, varied or revoked, or for the period of time specified by the Governor and will be subject to such conditions as the Governor thinks fit.
- (b) The holder of an ATS approval that is suspended or revoked shall forthwith surrender the approval certificate to the Governor.
- (c) The approval holder shall make any payment required by the appropriate requirements in respect of continued validity or variation of the approval.

## 172.61 Organisation Exposition or Service Manual

An applicant for the grant of an ATCU approval shall provide the Governor with an acceptable Exposition which complies with Appendix A. An applicant for the grant of an AFISU approval shall provide the Governor with an acceptable FISM which complies with Appendix D.

#### 172.63 Human Factors

An applicant for the grant of an ATSU approval shall ensure that Human Factors (HF) aspects are taken into account in the establishment and continuing provision of ATC.

#### 172.65 SMS and QMS

- (a) An applicant for the grant of an ATS approval shall establish and maintain, to the satisfaction of the Governor, a SMS and QMS which is commensurate with the size of the organisation and the complexity of its operation.
- (b) The SMS shall include:
  - (1) a Safety Policy and Safety Objectives signed by the Accountable Manager which reflects an organisational commitment towards safety throughout the organisation and sets out:
    - (i) management commitment; and
    - (ii) safety accountability and responsibilities within the SMS; and
    - (iii) appointment of key safety personnel including a Safety Manager who is responsible for the implementation and maintenance of an effective SMS; and
    - (iv) SMS documentation; and
    - (v) coordination of emergency response planning
  - (2) provision for safety risk management including:
    - (i) hazard identification based on reactive and proactive methods; and
    - (ii) safety reporting and investigation processes; and
    - (iii) safety risk assessment and mitigation.

- (3) provision for safety assurance including:
  - (i) safety performance monitoring and measurement; and
  - (ii) the management of change; and
  - (iii) continuous improvement.
- (4) safety promotion including:
  - (i) training and education, appropriate to each individual's involvement in the SMS, to ensure that personnel are trained and competent to perform their duties; and
  - (ii) safety communication.
- (c) the QMS shall:
  - (1) identify applicable requirements, regulations and standards and demonstrate compliance with them; and
  - (2) ensure technical manuals, checklists and other documentation are appropriately maintained and incorporate the latest amendments; and
  - (3) ensure that training programmes maintain staff proficiency and competency.
- (d) The SMS and QMS shall be described in the relevant documentation and shall be acceptable to the Governor.
- (e) The SMS and QMS used may be that of the Aerodrome Certificate holder or a separate complementary system.
- (f) In addition to procedures described in subparagraphs (a), (b), (c), d) and (e) the applicant for the grant of an ATCU approval shall establish and maintain safety review procedures. The procedures shall ensure:
  - (1) safety reviews are conducted by appropriately experienced and licenced personnel who are familiar with the relevant ICAO SARPS and PANS ATM: and
  - (2) safety reviews are systematically conducted on a regular basis as defined by the SMS; and
  - (3) findings identified are submitted to senior personnel and results, recommendations, and remedial actions are recorded in the appropriate safety management documentation; and
  - (4) the scope of any review is conducted in accordance with PANS ATM Doc 4444 2.5.2 and scheduled to cover all defined issues over a specified period.

## 172.67 Fatigue Management

An Applicant for the grant of an ATCU approval shall establish and maintain to the satisfaction of the Governor; a Fatigue Risk Management System (FRMS) or establish procedures and scheduling compliant with the Fatigue Management Scheme as defined in Appendix F.

#### (a) a FRMS shall include:

- (1) FRMS and Fatigue Objectives signed by the Accountable Manager which reflects an organisational commitment towards managing fatigue throughout the organisation and sets out:
  - (i) management commitment to providing adequate resource for the FRMS; and
  - (ii) management commitment to continuous improvement of the FRMS; and
  - (iii) management commitment to effective safety reporting
  - (iv) management accountability and responsibilities within the FRMS: and
  - (v) shared responsibility of management, air traffic controllers, and other involved personnel; and
  - (vi) be signed by the accountable manager; and
  - (iv) FRMS documentation, including procedures and training programmes; and
  - (vii) scope of the FRMS
- (2) provision for fatigue risk management including:
  - (i) hazard identification based on reactive, proactive, and predictive methods; and
  - (ii) evidence based
  - (iii) fatigue hazard reporting and investigation processes including self-reporting and fatigue surveys; and
  - (iv) evidenced based scheduling and tracking of scheduled and actual worked times; and
  - (v) fatigue risk assessment and mitigation
- (3) provision for FRMS safety assurance including:
  - (i) continuous FRMS performance monitoring and measurement; and
  - (ii) internal audits, surveys, and fatigue studies; and
  - (iii) the management of change; and
  - (iv) identify changes within the organization and operational environment that may affect the FRMS; and
  - (v) continuous improvement; and
  - (vi) the elimination and/or modification of preventative controls that negatively affect the FRMS; and
  - (vii) routine evaluations of facilities, equipment, documentation and procedures and identify the need for new procedures to mitigate against emerging fatigue-related risks.
- (4) provision for Fatigue Risk Management safety promotion including:
  - (i) training and education, appropriate to each individual's involvement in the FRMS, to ensure that personnel are trained and competent to perform their duties; and
  - (ii) FRMS communication plan describing FRMS policies, procedures, responsibilities and, describing communication routes used to gather and distribute FRMS-related information.

#### 172.69 Fatigue Management Reporting

ATCU shall report breaches of the Fatigue Management Scheme as defined in Appendix F to the Governor using the Mandatory Occurrence Reporting (MOR) Scheme as defined by OTAR Part 13. The event types to be reported are, but not limited to:

- (a) breaches of Prescriptive limitations as defined in Appendix F; and
- (b) breaches of Limitations as defined by the approved FRMS; and
- (c) breaches of any temporary approved roster or ATCU specific modification; and
- (d) any other fatigue related event.

## 172.71 Personnel requirements

- (a) An applicant for the grant of an ATSU approval shall nominate:
  - (1) a senior person identified as the Accountable Manager who has the authority within the applicant's organisation to ensure that each ATC service listed in its Exposition or FISM (as appropriate):
    - (i) provides a safe service to aircraft; and
    - (ii) can be adequately financed and resourced; and
    - (iii) is provided in accordance with the requirements prescribed by this Part.
  - (2) a senior person or persons who are responsible for ensuring that the applicant's organisation provides a safe service to aircraft and complies with the requirements of this Part. Such nominated person or persons shall be ultimately responsible to the Accountable Manager; and
  - (3) sufficient personnel to manage, support and provide a safe ATS and any associated training or assessment listed in the applicant's Exposition or FISM (as appropriate).
- (b) The applicant shall establish procedures to:
  - (1) ensure that those personnel who provide the ATS hold appropriate current licences and ratings issued under OTAR Part 65 and in particular that:
    - (i) personnel giving instruction in an operational ATC environment hold an appropriate, current ATC Instructor rating; or
    - (ii) personnel giving instruction in an operational AFIS environment hold an appropriate approval to provide such training; and
    - (iii) personnel carrying out assessment for the issue of licences or the issue or validation of ratings, hold an appropriate current ATC Instructor or ATS Assessor rating issued under OTAR Part 65.
  - (2) facilitate, for validated ATC licence holders, compliance with the recent experience requirements of OTAR Part 65; and

- (3) ensure that licence holders do not exercise the privileges of the licence:
  - (i) unless they are familiar with all relevant and current information; and
  - (ii) unless they comply with any endorsements on their medical certificates; or
  - (iii) while under the influence of any psychoactive substance; or
  - (iv) when any decrease in their medical fitness might render them unable safely to exercise the licence privileges.
- (4) ensure that any incidence of an OTAR Part 65 licence holder reporting for or being on duty while suspected of being under the influence of any psychoactive substance results in immediate suspension from duty and the submission without delay of a report of the details of the case to the Governor.

## 172.73 Facility requirements

An applicant for the grant of an ATSU approval shall establish suitable facilities, including training and assessment facilities, appropriate to the ATS services listed in the applicant's Exposition or FISM, as required in Appendices B and D.

## 172.75 Security

- (a) An applicant for the grant of an ATCU approval shall establish security procedures which minimise the risk of destruction, damage to, or interference with the operation of the ATCU where such destruction, damage or interference is likely to endanger the safety of aircraft.
- (b) The security procedures shall include and specify:
  - (1) that access to permanent ATC facilities operated by the applicant is subject to control through the use of a security permit system to prevent unauthorised entry including the visual/manual or biometric verification of the identity of each person requesting access; and

**Note:** The use of biometric verification systems requires approval as defined in OTAR 178.

- (2) means for protection of personnel on duty; and
- (3) procedures in the event of a bomb threat or other threat of acts of unlawful interference against an ATCU; and
- (4) procedures for monitoring unattended ATCU buildings and critical Aeronautical, Telecommunications and Navigational Aid sites, including those located off-aerodrome, to ensure that any intrusion or interference is detected; and
- (5) airspace management that contributes to aviation security, including provisions for securing airspace, provision for temporary airspace restrictions, emergency security control and, monitoring and reporting of security identification zones; and

- (6) protection of Information and Communication Technology including cybersecurity; and
- (7) adequate support is provided to law enforcement flight operations; and
- (8) adequate support is provided to unidentified or strayed aircraft.
- (c) An applicant for the grant of an AFISU approval shall establish security procedures which minimise the risk of destruction, damage to, or interference with the operation of the AFISU where such destruction, damage or interference is likely to endanger the safety of aircraft.
- (d) The security procedures shall include and specify:
  - (1) means for protection of personnel on duty; and
  - (2) procedures for monitoring unattended ATCU buildings and critical Aeronautical, Telecommunications and Navigational Aid sites, including those located off-aerodrome, to ensure that any intrusion or interference is detected; and
  - (3) protection of Information and Communication Technology including cybersecurity; and
  - (4) adequate support is provided to law enforcement flight operations; and
  - (5) adequate support is provided to unidentified or strayed aircraft.

## 172.77 Exposition and FISM

- (a) The holder of an ATS approval shall ensure that its Exposition or FISM is amended such that it remains a current description of the holder's organisation and services.
- (b) The approval holder shall ensure that any amendments made to the holder's Exposition:
  - (1) meet the applicable requirements of this Part; and
  - (2) comply with the amendment procedures contained in the holder's Exposition.
- (c) Subject to paragraph 172.77(b), the approval holder shall provide the Governor with a copy of each amendment to the holder's Exposition as soon as practicable after its incorporation into the Exposition:
  - (1) for printed amendments, at least 15 working days in advance of their effective date; or
  - (2) for amendments of an urgent or immediate nature, without delay, and no later than the date on which they are effective.
- (d) Where an approval holder proposes to make a change to any of the following, prior notification to and acceptance by the Governor is required:
  - (1) the Accountable Manager; or

- (2) the listed senior persons; or
- (3) any aspect of Air Traffic Management (ATM) that may have an adverse effect on ATS provided by agencies responsible for adjacent airspace.
- (e) The Governor may prescribe conditions under which an approval holder may operate during or following any of the changes specified in this paragraph and the approval holder shall comply with those conditions.
- (f) Where any of the changes referred to in this paragraph require an amendment to the approval, the approval holder shall forward the approval certificate to the Governor as soon as practicable.
- (g) The approval holder shall make such amendments to the holder's Exposition as the Governor may consider necessary in the interests of aviation safety.

#### 172.79 Establishment of service

- (a) An applicant for the grant of an ATS approval shall include with the application:
  - (1) for each aerodrome and airspace, a schedule of the proposed hours of service; and
  - (2) in respect of an aerodrome or airspace not currently provided with an ATS, a summary of safety factors considered before seeking approval.
- (b) An applicant for the grant of an ATS approval intending to assume responsibility for providing any ATS from an existing approval holder shall include with its application full details of transitional arrangements endorsed by the Accountable Managers of both organisations.

#### 172.81 Withdrawal or transfer of service

- (a) The holder of an ATS approval who wishes permanently to withdraw an ATS shall give the Governor at least 90 working days' notice of the proposal and include in that notice a summary of factors considered in arriving at the decision to withdraw the service.
- (b) The holder of an ATS approval who intends permanently to reduce the hours of operation of an ATS shall provide to the Governor advance notice of, and the reasons for, the proposed reduction.
- (c) The holder of an ATS approval who is the outgoing provider of an ATS shall provide all relevant operations manuals to ensure the continuing safe operation and necessary assistance in the preparation and execution of the transitional arrangements required by paragraph 172.75.

## **Subpart D - Operating Requirements**

## 172.101 Manual of Air Traffic Services (MATS)

- (a) An applicant for the grant of an ATCU approval shall provide, for compliance by its personnel, a MATS for the services listed in its Exposition and which complies with Appendix C.
- (b) An applicant for the grant of an ATCU approval which includes an ATC service or services from more than one location shall provide a Manual specific to each location.
- (c) The Manual shall describe the operational procedures of that ATCU which shall comply with ICAO Annex 11 and ICAO Doc 4444.
- (d) The Manual shall be kept up to date and amendments to the Manual shall be forwarded to the Governor:
  - (1) at least 15 working days in advance of their effective date; or
  - (2) in the case of amendments of an urgent or immediate nature, without delay, and no later than the date on which they are effective.

## 172.103 General information requirements

The applicant shall establish systems and procedures to ensure that each ATS, as appropriate to the area of responsibility, is kept informed of the operational status of operationally significant hazards and facilities.

## 172.105 Notification of facility status

An applicant for the grant of an ATS approval shall establish procedures to notify users of its ATS, of relevant operational information and of any changes in the operational status or availability of each facility or service listed in the applicant's Exposition or FISM.

## 172.107 Meteorological information and reporting

- (a) An applicant for the grant of an ATS approval shall establish systems and procedures to ensure satisfactory provision of meteorological information to the ATS in accordance with OTAR 174. The meteorological information shall be that necessary for the performance of their respective functions, in a form that requires a minimum of interpretation by ATS personnel.
- (b) The applicant shall establish procedures to ensure that equipment used in the compilation of routine or special weather reports:
  - (1) supplies data representative of the area for which the measurements are required; and

- (2) where that equipment consists of multiple wind direction and speed indicators, identifies the runway, or section of the runway, monitored by each instrument.
- (c) The applicant shall establish a procedure to ensure that the information contained in a meteorological bulletin remains unchanged through onward transmission.
- (d) Procedures shall encourage the transmission to aircraft of meteorological information from a source other than those specified in paragraph 172.107(a) where it is in the interests of safety, provided that the origin of the information is made clear when doing so.

## 172.109 Altimeter setting procedures

An applicant for an ATS approval shall ensure that:

- (a) altimeter settings are available in both hectopascals and inches of mercury; and
- (b) altimeter settings given in hectopascals are rounded down to the nearest whole hectopascal; and
- (c) the appropriate aerodrome or area QNH setting is provided to all aircraft on initial radio contact, including aircraft that advise having received the current applicable ATIS broadcast; and
- (d) ATS provide an aircraft, on request, the current applicable aerodrome or area QNH setting; and
- (e) the requirements of OTAR Part 1 Subpart C are met.

## 172.111 Watch Log

- (a) An applicant for an ATS approval shall establish a logbook, with sequentially numbered pages, which is kept at every location within a unit from where an ATS is, or may be, provided.
- (b) The procedure shall ensure that:
  - (1) the logbook is maintained by the senior person on duty, or the person on watch at a nominated operating position; and
  - (2) the logbook is maintained throughout the hours of watch of the unit; and
  - (3) all entries include the time of entry in UTC; and
  - (4) the person responsible for maintaining the logbook signs 'On Watch' and 'Off Watch' and that transfer of responsibility is indicated by successive 'On Watch' and 'Off Watch' entries; and
  - (5) logbook entries are:
    - (i) in chronological sequence and in ink; and
    - (ii) without erasure, defacement, or obliteration; and

- (iii) corrected by drawing a single line through the erroneous information and initialling the correction; and
- (6) actual times of opening and closing watch are recorded in the logbook, together with the reason for every variation from published hours of service; and
- (7) significant events and operational information of note to controllers and unit management is recorded accurately in the logbook; and
- (8) essential aerodrome information and changes to runway in use; and
- (9) details of reportable events in accordance with OTAR Part 13; and
- (10) logbooks are retained for a period of 3 years from the date of final entry.

## 172.113 Training, assessment and competence

- (a) An applicant for the grant of an ATS approval shall establish training programmes and procedures to assess and ensure the initial and continuing competence of staff in aspects of their role(s).
- (b) The programmes and procedures required by paragraph 172.113(a) shall ensure that operational personnel are trained, given regular recurrent training in normal and emergency procedures and are assessed on such.
- (c) The management system shall include processes to ensure that prompt action is taken to minimise risk when there is definite evidence that the controller's competence has deteriorated below the required standard.
- (d) The programmes and procedures required by paragraph 172.113(a) shall be established in a form acceptable to the Governor, as a Unit Competence Scheme (UCS) and/or a Unit Training Programme (UTP).

#### 172.115 Shift administration

An applicant for the grant of an ATS approval shall establish a procedure to ensure that adequate time is provided:

- (a) at the beginning and end of each shift, for the performance of those duties required:
  - (1) before providing an ATS; and
  - (2) after ceasing to provide an ATS; and
- (b) for each transfer of watch at an operating position.

## 172.117 Prevention of fatigue

- (a) An applicant for the grant of an ATCU approval shall establish suitable procedures to mitigate the effects of fatigue on ATC operational staff.
- (b) A Fatigue Risk Management System as detailed in 172.67(a) shall be included in the Exposition.

## 172.119 Responsibility for control

- (a) An applicant for the grant of an ATCU approval in respect of an ATC service shall establish procedures to ensure that any controlled flight is under the control of only one ATC operating position at any given time.
- (b) The applicant shall establish procedures to ensure that responsibility for the control of all aircraft operating within a given block of airspace is vested in a single operating position. Control of an aircraft or groups of aircraft may be delegated to other operating positions provided that co-ordination between all affected operating positions is assured.
- (c) The applicant shall establish procedures for the transfer of responsibility for the control of an aircraft which shall ensure that:
  - (1) transfer arrangements are:
    - (i) agreed between ATCUs responsible for adjacent airspaces and published in ATC Letters of Agreement; and
    - (ii) in place for separate operating positions within an ATCU and promulgated in the holder's MATS; and
  - (2) responsibility for control of an aircraft is not transferred from one ATCU to another without:
    - (i) communication of appropriate parts of the current flight plan; and
    - (ii) any relevant control information; and
    - (iii) the consent of the accepting unit; or
    - (iv) in accordance with standard procedures; or
    - (v) Letters of Agreement.
- (d) Where an ATCU provides both a flight information service and an air traffic control service, the holder shall establish procedures within their MATS which define clear priorities to ensure that whenever appropriate the provision of an air traffic control service has precedence over the provision of a flight information service. It is recognised that during critical stages of flight (e.g. final approach, landing, take off and climb), pilots may require essential information, other than that pertaining to the provision of an air traffic control service, to be passed without delay.

## 172.121 Flight Priorities

The ATCU shall ensure that controllers give priority to aircraft according to the flight category listed in Table 172-1, where Category A is the highest priority and Z is the lowest.

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#### **Table 172-1**

Category	Type of Flight
Α	Aircraft in emergency (e.g. engine fault, fuel shortage, seriously ill passenger).
	Aircraft which have declared a 'Police Emergency'.
	Ambulance/Medical/Search and Rescue aircraft when the safety of life is
	involved.
В	Flights operating for Search and Rescue or other humanitarian reasons.
	Police flights under normal operational priority.
	Post-accident flight checks.
	Other flights, including Open Skies Flights, authorised by the Governor.
С	Royal Flights which have been notified by
	Flights carrying visiting Heads of State NOTAM/Temporary Supplement
D	Flights notified by the Governor carrying Heads of Government or very senior
	government ministers.
E	Flight check aircraft engaged on, or in transit to, time or weather critical
	calibration flights.
	HEMS/Search and Rescue positioning flights.
	Other flights authorised by the Governor.
Normal	Flights which have filed a flight plan in the normal way and conforming with
Flights	normal routing procedures.
Z	Training, non-standard and other flights.

Note: Ambulance aircraft carry one or more patients or casualties, whereas medical aircraft carry harvested organs, biological material, medical equipment and/or medical personnel. Search and Rescue aircraft may operate as an ambulance or medical aircraft.

## 172.123 Co-ordination requirements

- (a) An applicant for the grant of an ATCU approval shall establish systems and procedures to ensure, where applicable, effective two-way co-ordination between each ATCU listed in the applicant's Exposition and the following agencies:
  - (1) each ATCU responsible for adjoining airspace, and
  - (2) any other ATCU with which regular operational co-ordination may be required.
  - (3) aeronautical telecommunication service organisations; and
  - (4) aviation meteorological services; and
  - (5) Aeronautical Information Services (AIS); and

- (6) aircraft operators; and
- (7) Search and Rescue (SAR) authorities; and
- (8) military authorities; and
- (9) where the ATCU is an Aerodrome Control Unit:
  - (i) the aerodrome operator; and
  - (ii) the apron management service, if that service is not provided by the Aerodrome Control Unit; and
  - (iii) the Aerodrome Rescue and Fire-Fighting Service (RFFS).
- (b) Procedures shall facilitate both regular and ad hoc communication and take account of any urgent need to pass information.
- (c) The procedures shall:
  - (1) detail such matters as are necessary for effective co-ordination between the parties; and
  - (2) be kept current; and
  - (3) be supported by a written agreement signed by senior representatives of the parties involved; and
  - (4) be part of the applicant's MATS.
- (d) The procedures shall ensure, in particular, that the ATCU and aircraft operators, where they require the information, are provided, through the exchange of ATS messages, with details of:
  - (1) the intended movement of each aircraft for which a flight plan has been filed, and any amendments to that flight plan; and
  - (2) current information on the progress of the flight.
- (e) ATS messages shall be prepared and transmitted in accordance with the procedures detailed in ICAO Doc 4444.

## 172.125 Service disruption and contingency plans

- (a) An applicant for the grant of an ATCU approval shall establish plans to implement in the event of disruption or potential disruption of ATC services and related supporting services in airspace for which they intend to be responsible for providing such services.
- (b) Contingency plans shall be developed in close co-ordination with the ATC services authorities responsible for the adjacent portions of airspace and, as far as practicable, with airspace users concerned and with any civil or military agencies which may be affected or whose participation is necessary for effective implementation of the plan.

- (c) Contingency plans shall take into account the guidance material contained in *Attachment C* of ICAO Annex 11 and ICAO Doc 4444. A plan shall also ensure that procedures are established for radio communication contingencies and where applicable, emergency separation. These procedures shall also be entered into the MATS.
- (d) Contingency plans shall include provisions for security related events and take into account guidance material contained in ICAO Doc 9985.
- (e) The plans shall include provision for notifying appropriate personnel of its existence, amendments to it and the means of activating it.
- (f) Contingency plans shall be reviewed at frequent intervals and when any operational change is planned to ensure their currency and continued efficacy.

#### 172.127 Incidents and accidents

- (a) An applicant for the grant of an ATS approval shall establish procedures to be adopted following an incident or accident.
- (b) The procedures shall cover:
  - (1) the action required to determine whether any air navigation facilities may have contributed to the event and any subsequent action; and
  - (2) the process to be followed when an ATCO or AFISO is involved in an incident or accident.
  - (3) the notification, investigation and reporting of incidents in accordance with OTAR Part 13 Occurrence Reporting; and
  - (4) the notification and reporting of accidents; and
  - (5) the preservation and retention of records, required under OTAR Part 13 or the Territory's accident investigation legislation, to assist any investigation.

#### 172.129 Records

- (a) An applicant for the grant of an ATCU approval shall establish systems and procedures to manage records.
- (b) The records shall include:
  - (1) telephone communications; and
  - (2) radio broadcasts and communications; and
  - (3) background communication and the aural environment at ATCO operating positions; and
  - (4) air-ground digital data exchanges, where appropriate; and
  - (5) surveillance information, where appropriate; and

- (6) filed flight plans including standard and repetitive plans; and
- (7) flight progress strips.
- (c) The applicant shall establish procedures to ensure that the records referred to in paragraph 172.127(b) are retained for at least 30 days from the date of entry.
- (d) An applicant for the grant of an AFISU approval shall establish systems and procedures to manage records.
- (e) The records shall include:
  - (1) filed flight plans including standard and repetitive plans; and
  - (2) flight progress strips
- (f) The applicant for the grant of shall establish procedures to ensure that the records referred to in paragraph 172.127(b) are retained for at least 30 days from the date of entry.

## 172.131 Continued compliance

The service provider, on receipt of an approval, shall:

- (a) continue to meet the standards and comply with the requirements of the relevant Subparts of this OTAR Part; and
- (b) comply with all procedures and programmes detailed in its approved Exposition, FISM and MATS; and
- (c) at each location covered by the approval hold in hard copy, electronic or other form acceptable to the Governor:
  - (1) at least one current copy of the relevant sections of its Exposition and FISM applicable to the operation; and
  - (2) make each applicable part of its Exposition and FISM available to personnel who require those parts to carry out their duties; and
  - (3) sufficient copies of the unit's MATS and FISM for one to be readily accessible by all personnel who may need to refer to it.
  - (4) A process to identify and acceptably mitigate any deficiencies in the requirements that might not be under their control; and
- (d) notify the Governor promptly of any change of address for service, telephone number or facsimile number.

## 172.133 Runway Safety Programme

The provider of an ATS shall participate in a runway safety programme as required by OTAR Part 139.

## **Subpart E – Aerodrome Flight Information Services (AFIS)**

#### 172.151 Aerodrome Flight Information Service

- (a) AFIS units are subject to approval under the Order. The Order requires that:
  - (1) provision of an AFIS shall be by suitable personnel appropriately licensed by the Governor; and
  - (2) AFIS shall be provided in accordance with the standards and procedures specified in the FISM; and
  - (3) the FISM shall be maintained to the satisfaction of the Governor, who may require amendments or additions to be made; and
  - (4) an acceptable QMS and SMS is in place at the AFIS Unit; and
  - (5) appropriate arrangements are in place for the provision of:
    - (i) the Aeronautical Information Service (AIS); and
    - (ií) the Meteorological Service; and
    - (iii) Communication and Navigation Services (CNS) technical support.
- (b) This Subpart sets out the requirements for a FISM that will be acceptable to the Governor and under which an AFIS shall be provided.

## 172.153 AFIS personnel requirements

Personnel undertaking the responsibilities of providing AFIS shall hold a licence issued under OTAR Part 65 and validated for use at the aerodrome concerned.

# 172.155 Responsibility of an Aerodrome Flight Information Service Officer (FISO)

- (a) FISOs shall maintain a continuous watch during notified hours by visual observation on all flight operations on and in the vicinity of an aerodrome as well as on vehicles and personnel on the manoeuvring area.
- (b) The FISO shall provide a service in accordance with procedures contained in this OTAR Part and local instructions in the FISM and other relevant documents as required in Appendix D.
- (c) The privileges of a FISO licence are detailed in OTAR 65.

## 172.157 Flight Information Service Manual (FISM)

- (a) The provider of an AFIS shall provide, for compliance by its personnel, a FISM containing the operational procedures, administrative procedures and facility requirements of that unit as required in Appendix D.
- (b) A draft FISM shall be submitted to the Governor at least 90 working days before the proposed date of commencement of the AFIS at the unit.

(c) The FISM shall be kept up to date and copy of any amendment to it shall be submitted to the Governor at least 15 working days before any proposed changes become effective, or in the case of amendments of an urgent or immediate nature, without delay and no later than the date on which they are effective. The AFIS unit shall implement any amendment or change to the FISM required by the Governor.

### 172.159 Meteorological (MET) Information

- (a) The FISO shall be able to provide meteorological information to a pilot upon request, as required in Appendix D.
- (b) If the FISO is not a qualified Meteorological Observer, the Meteorological Observation shall be prefixed by the phrase 'unofficial local report'.

## **Appendix A – Organisation Exposition**

#### **Content of the Exposition (172.77)**

- (a) An applicant for the grant of an ATCU approval shall provide a statement signed by the Accountable Manager on behalf of the applicant's organisation confirming that the Exposition and the appropriate MATS:
  - (1) define the organisation and demonstrate its means and methods for ensuring safe ATC services are provided to aircraft and continuing compliance with this and any other applicable Part; and
  - (2) are required to be complied with by its personnel at all times; and
- (b) The Exposition shall also include:
  - (1) the titles and names of the senior person or persons; and
  - (2) the duties and responsibilities of the senior person or persons specified in the organisation Exposition, including matters for which they have responsibility to deal directly with the Governor on behalf of the organisation; and
  - (3) an organisation chart showing lines of responsibility of the senior persons specified in the organisation Exposition, and extending to each location in the organisation Exposition; and
  - (4) the location of the ATCU, airspace or aerodrome being served and the services provided; and
  - (5) details of the applicant's staffing structure for each ATCU; and
  - (6) details of procedures required by 172.67 and 172.113 regarding the competency, qualifications, maintenance of current operating practice and fitness of personnel; and
  - (7) details of procedures required by paragraph 172.113 regarding the qualifications of ATC training personnel, the Unit Training Plan and assessment of ATC personnel; and
  - (8) details of the systems, procedures, and programmes required by paragraph 172.65 regarding the safety and QMSs; and
  - (9) the fatigue management programme for each ATCU as required by paragraph 172.117; and
  - (10) procedures to control, amend and distribute the Exposition.

## Appendix B - Facility requirements

#### Air Traffic Control Facility requirements (172.73)

- (a) An applicant for approval of an aerodrome control service shall establish procedures to ensure that the aerodrome control tower is:
  - (1) constructed and situated to provide a suitable environment which gives:
    - (i) unrestricted visibility of all runways, taxiways and aprons; and
    - (ii) the maximum practicable visibility of traffic flying in the vicinity of the aerodrome; and
    - (iii) protection from glare and reflection; and
    - (iv) protection from noise and extremes of temperature; and
    - (v) emergency lighting; and
    - (vi) means of emergency egress/escape.
- (b) safeguarded from any development that would affect the requirements of Appendix B paragraph (a)(1); and
- (c) at solo watch locations, provided with amenities that ensure the minimum possible interruption to, or degradation of, ATC services; and
- (d) provided with equipment for two-way voice communication with:
  - (1) aircraft in or adjacent to airspace for which the applicant has responsibility; and
  - (2) aircraft, vehicles and persons, on or adjacent to, the manoeuvring area; and
- (e) provided with the following minimum equipment, appropriately located:
  - (1) a display system or systems designed to show the disposition of current and pending aerodrome traffic together with ancillary information for individual aircraft: and
  - (2) appropriate power supplies; and
  - (3) appropriate and current maps and charts; and
  - (4) binoculars; and
  - (5) a clock displaying UTC in hours and minutes; and
  - (6) a logbook; and
  - (7) an outside temperature indicator; and
  - (8) a display of the appropriate pressure settings; and
  - (9) a signal lamp capable of showing green, red and white directed beams; and
  - (10) telephone communications; and
  - (11) status monitors for any approach and landing aids and any road signalling equipment affecting the use of a runway; and

#### **Air Traffic Control Facility requirements (172.73)**

- (12) visibility checkpoints; and
- (13) voice and, where applicable, data recording equipment; and
- (14) wind direction and speed display compliant with OTAR Part 174, Meteorological Service for Aviation; and
- (15) an audible alarm to alert the emergency services; and
- (16) an Aeronautical Fixed Telecommunication Network (AFTN) or appropriate acceptable terminal or, where provided for in a written agreement with another agency, an alternative means of reception and transmission of information; and
- (17) if applicable, airfield lighting controls and indication panel.
- (18) if applicable, an Air Traffic monitoring system (e.g. ADSB, radar display).
- (f) In addition to the above, an applicant for an approval which includes an Approach Control service shall ensure that approach control facilities are provided with:
  - (1) equipment enabling practical, two-way voice communication; and
  - (2) the following minimum equipment, appropriately located:
    - (i) for approach control operating positions for an aerodrome at which an Instrument Landing System (ILS) is installed, an ILS status monitor at the approach control or approach control surveillance operating position for that aerodrome; and
    - (ii) a wind direction and speed display fed from the same source as the corresponding equipment in the aerodrome control operating position.
- (g) At units where approach control and aerodrome control are performed only as a combined function at a single operating position, the facilities required need not be duplicated solely as a consequence of appearing in both paragraphs.
- (h) The applicant, in support of an ATC facility, shall:
  - (1) ensure compliance with the requirements of OTAR Part 171, Aeronautical Telecommunications Services, including for preventative maintenance and calibration; and
  - (2) ensure that visual display units used by ATC are positioned with due regard to the relative importance of the information displayed and ease of use by the staff concerned; and
  - (3) ensure that the required status monitors are fitted with:
    - (i) an audible signal to indicate a change of status; and
    - (ii) a visual indication of the current status
  - (4) ensure that Information and Communication Technology systems are adequately secure and take into account guidance material contained in ICAO Doc 9985.

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#### Air Traffic Control Facility requirements (172.73)

- (5) ensure that clocks displaying UTC in hours and minutes are regularly checked for accuracy to within plus or minus 30 seconds.
- (6) Provision of adequate signage which clearly indicates that ambient recording is in progress in operational areas

#### **Appendix C – Manual of Air Traffic Services (MATS)**

#### Content of the Manual of Air Traffic Services (MATS) (172.101)

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#### The Manual shall include:

- (1) the information required by paragraph 172.79 regarding hours of service, the establishment of an ATC service and any transitional arrangements; and
- (2) details of the procedures required by paragraph 172.65 regarding the control of documentation; and
- (3) details of the systems and procedures required by paragraph 172.103 regarding general information requirements; and
- (4) details of the procedures required by paragraph 172.105 regarding the notification of facility status; and
- (5) details of the systems and procedures required by paragraph 172.107 regarding meteorological information and reporting including local and unofficial reports; and
- (6) details of altimeter setting procedures required by paragraph 172.109; and
- (7) details of the procedures required by paragraph 172.111 regarding the keeping of logbooks; and
- (8) procedures regarding shift administration required by paragraph 172.115; and
- (9) procedures required by paragraph 172.117 to mitigate the effects of fatigue; and
- (10) details of the procedures required by paragraph 172.119 regarding responsibility for control; and
- (11) details of the systems and procedures required by paragraph 172.121 regarding co-ordination requirements; and
- (12) the contingency plans required by paragraph 172.123; and
- (13) procedures required by paragraph 172.75 regarding aviation security and support against unlawful interference; and
- (14) details of the procedures regarding for handling incidents and accidents required by paragraph 172.125; and
- (15) details of systems and procedures required by paragraph 172.127 regarding the retention and management of records; and
- (16) details of the procedures required by paragraph 172.123 regarding disruptions to service; and
- (17) details of the procedures for issuing ATC clearances and obtaining a correct read- back of clearances from vehicles and pilots and safety-related information; and

#### Content of the Manual of Air Traffic Services (MATS) (172.101)

- (18) details of systems and procedures regarding the provision of approach control services, where applicable; and
- (19) details of systems and procedures regarding the provision of aerodrome control service, where applicable; and
- (20) details of the procedures regarding the application of priorities; and
- (21) details of the procedures regarding flow control; and
- (22) details of systems and procedures regarding the provision of flight information service; and
- (23) details of systems and procedures regarding the provision of alerting service; and
- (24) details of the procedures regarding the processing of flight plans; and
- (25) details of the procedures regarding time system and accuracy in the provision of ATC services; and
- (26) details of the radio and telephone procedures including the use of callsigns; and
- (27) details of the procedures regarding the provision of surveillance services where applicable; and
- (28) details of the procedures regarding radio communications contingency and emergency separation; and
- (29) details of the procedures regarding airborne collision avoidance systems alerts; and
- (30) details of the procedures regarding short term collision alerts and minimum safe altitude warnings, where applicable; and
- (31) details of the categories regarding aircraft emergencies in accordance with Appendix E; and
- (32) details of the arrangements in place for provision of AIS to the unit; and
- (33) details of the systems and procedures governing ATIS broadcasts; and
- (34) details of the procedures regarding the reporting of suspected infringements of legislation; and
- (35) details of the procedures regarding VFR flight operations at night.
- (36) details of the procedures regarding Flight Priorities as required by paragraph 172.121
- (37) details of the procedures governing the use of uncertified ATM displays

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## **Appendix D – Flight Information Service Manual (FISM)**

#### Flight Information Service Manual (FISM) (172.157)

#### The FISM shall include:

- (a) a description of the facility, which shall be equipped with large unobstructed windows ensuring the best possible view of the aerodrome, the surrounding area, the manoeuvring area including the runway, and the approaches.
- (b) the description shall confirm that the following items are provided:
  - (1) headset or fitted speakers, microphone and transceiver radio selector panel (if more than one frequency is available e.g. UHF vehicle frequency); and
  - (2) telephone selector panel/handsets(s) to public telephone network; and
  - (3) main power supply; and
  - (4) signal lamp; and
  - (5) wind speed and direction indicator; and
  - (6) barometric altimeter/precision barometer or other means of establishing QNH and QFE; and
  - (7) clock (set to UTC); and
  - (8) aerodrome lighting panel (if lights available); and
  - (9) NAVAID monitoring panel (if NAVAIDs available); and
  - (10) internal lighting including emergency lighting; and
  - (11) logbook or other appropriate method of recording AFIS activity; and
  - (12) flight data display; and
  - (13) clipboards/displays (for NOTAMs etc.); and
  - (14) the information regarding hours of service (which shall also be notified in the Aerodrome sections of the Territory's AIP); and
  - (15) details of the procedures regarding the control of documentation; and
  - (16) details of the systems and procedures regarding the status of the airfield, including any equipment necessary for the provision of a safe service; and
  - (17) details of the systems and procedures regarding meteorological information and reporting including:
    - (i) SIGMETs; and
    - (ii) surface wind direction and speed; and
    - (iii) relevant altimeter pressure setting(s); and
    - (iv) outside air temperature; and
    - (v) visibility; and

#### Flight Information Service Manual (FISM) (172.157)

- (vi) present weather; and
- (vii) details of cloud cover; and
- (18) details of altimeter setting procedures; and
- (19) details of the procedures requiring the keeping of logbooks; and
- (20) procedures regarding shift administration; and
- (21) procedures to mitigate the effects of fatigue; and
- (22) details of the procedures regarding responsibility for control of surface traffic/personnel where applicable; and
- (23) the contingency plans to deal with service disruption; and
- (24) details of systems and procedures regarding the retention and management of records; and
- (25) details of the radio and telephone procedures, including the requirement that when an AFIS is being provided, the suffix "Information" shall be used; and
- (26) details of the procedures for relaying clearances and obtaining a correct readback of clearances and safety-related information; and
- (27) details of systems and procedures regarding the provision of alerting service for aircraft emergencies in accordance with Appendix E; and
- (28) details of the procedures regarding the processing of flight plans; and
- (29) details of the procedures regarding time system and accuracy in the provision of AFIS; and
- (30) details of the arrangements in place for provision of AIS to the unit; and
- (31) details of the procedures regarding the reporting of suspected infringements of legislation.
- (32) procedures required by paragraph 172.75 regarding aviation security and support against unlawful interference; and

#### Appendix E – Emergency categories

The following terms shall be used in relation to alerting emergency services:

#### (a) Aircraft accident/Aircraft accident imminent

Aircraft accidents that have occurred or are inevitable on, or in the vicinity of, the aerodrome.

#### (b) Aircraft ground incident

Where an aircraft on the ground is known to have an emergency situation, other than an accident, requiring the attendance of emergency services.

#### (c) Full emergency

When it is known that an aircraft is, or is suspected to be, in such trouble that there is a danger of an accident.

#### (d) Local standby

When it is known that an aircraft has, or is suspected to have, developed some defect but the trouble would not normally involve any serious difficulty in effecting a safe landing.

Also used at some units when an aircraft has to be searched following a bomb warning or requires inspecting on the ground by the aerodrome fire service.

#### (e) Weather standby

When weather conditions are such as to render a landing difficult or difficult to observe.

#### (f) Domestic fire

The classification 'Domestic' is given to any fire:

- (1) on the aerodrome which is not included in the categories above.
- (2) outside the aerodrome boundary (other than aircraft accidents) which is liable to constitute a danger to flying or aerodrome property.
- (3) which the Aerodrome Fire Service should attend:
  - (i) according to an agreement with the Local Fire Brigade; or
  - (ii) in response to calls from the public or Police on humanitarian grounds.

## Appendix F - Fatigue Management Scheme

#### **Prescriptive Limitations**

- (a) Prescriptive Requirements and Definitions
  Unless otherwise defined below, all words, phrases, definitions, and abbreviations, have identical meanings to those in OTAR Part 1.
  - (1) **Period of Duty** The period between the actual commencement of and the actual end of a shift during which an air traffic controller whose licence contains a rating valid at the unit exercises, or could be called upon to exercise, the privileges of the licence at that unit, and includes prescribed breaks, time spent on other duties such as training, airfield inspection, meteorological observations, collection of landing fees, administration and any extension of duty.
  - (2) Maximum Period of Duty Except where other limits are defined within these regulations no period of duty shall exceed 10 hours. Within 720 consecutive hours (30 days) the aggregate of periods of duty and on call duties shall not exceed 300 hours provided that periods of duty do not exceed 200 hours.
  - (3) Intervals between Periods of Duty There shall be an interval of not less than 12 hours between the conclusion of one period of duty and the commencement of the next period of duty. This interval may only be reduced (and only by a maximum of 1 hour) with the approval of the controller concerned and in any individual case such a reduction will be permitted no more than once in a period of 720 consecutive hours (30 days).
  - (4) Limit on and Interval following Consecutive Periods of Duty Upon the conclusion of six consecutive periods of duty within 144 consecutive hours (6 days), or upon consecutive periods of duty within 144 consecutive hours (6 days) reaching a total of 50 hours, whichever is the earlier, there shall be an interval of a minimum of 60 hours before the commencement of the next period of duty. This interval may be reduced in accordance with subparagraph below.
    - (i) Within 720 consecutive hours (30 days) there shall be not fewer than three intervals between the conclusion of one period of duty and the commencement of the next period of duty. These intervals shall total not less than 180 hours with the minimum interval being not less than 54 hours.
  - (5) **Operational Duty** The period during which an air traffic controller is actually exercising the privileges of the controller's licence at an operational position.
  - (6) **Breaks during Operational Duty** No operational duty shall exceed a period of two hours without there being taken during, or at the end of, that period a break or breaks totalling not less than 30 minutes during which period a controller does not exercise the privileges of their licence.
    - (i) Breaks shall include all measures necessary to ensure that controllers will not be suffering, to any extent as a consequence of their duties, mental or physical fatigue whilst exercising the privileges of their licence. Such measures are expected to include a certain

- detachment from the operation, e.g. rest areas, some of which shall afford the individual 'quiet space' and facilities for adequate refreshment.
- (ii) At units where workload for any part of the day is judged to be low and the activity is spasmodic rather than continuous, periods of operational duty, at these times, may be extended to a period acceptable to the Governor.

Note: Judgements on unit workload are to be made by unit managers in consultation with the Governor.

- (7) **Night Duty** A period of duty wholly or partly within the period of 0130 and 0529 hours local time.
- (8) **Limits on Night Duties** Not more than two-night duties may be worked in immediate succession. In all cases the maximum night duty period shall not exceed 10 hours and the night duty must conclude no later than 0730 hours.
- (9) **Interval After Night Duties** Upon the conclusion of a single night duty, or two consecutive night duties, there shall be an interval of a minimum of 54 hours before the commencement of the next period of duty.
  - (i) Air Traffic Service Units may, in exceptional circumstances and with the approval of the controller concerned, offer a controller a 48-hour minimum interval between the end of a single night duty and the commencement of the next period of daytime duty. This allowance is not permitted when planning for, or as part of, the published unit roster and is expected to be utilised only to cover short-notice staffing difficulties.
- (10) **On Call Duty** A period during which, by prior arrangement, a controller is required to be available to report at his place of work with the intention of providing an Air Traffic Control Service.
- (11) Limits for On Call Duties The Maximum On Call period of duty, where the controller does not attend the place of work, shall be 20 hours. For the purpose of this particular limitation, all On Call Duty time spent in attendance at the place of work shall count double. For example, if a controller attends the place of work ten hours after commencing an On-Call Duty the 20-hour maximum On Call period of duty will be reached when the controller completes five hours at the place of work [10 hours + (5 hours x 2 = 10 hours) = 20 hours]. Not more than two On Call duties shall be worked in a period of 144 hours (6 days).
  - (i) Prior to commencing an On Call duty controllers are to be rested in accordance with the scheme's regulations and, if called in, will be subject to the minimum interval between duty periods as specified in paragraph 2.3. An On Call duty controller who is not called in during an overnight On Call duty shall not be utilised before midday on the day the overnight On Call duty finished.
  - (ii) Normally only one attendance at the place of work per On Call duty shall be permitted. Units needing to operate in exceptional circumstances outside these limitations may seek modification by the Governor in accordance with paragraphs 3.1 and 3.2.

- (12) **Early Start** An early start is a period of duty that commences between 0530 and 0629 hours
- (13) **Limits on Early Starts** Not more than 2 early starts shall be worked in a period of 144 hours. Consecutive early start duties shall not be permitted where both duties commence before 0600 hours. An early start commencing before 0600 hours shall count as two morning duties when considering the limitations on consecutive morning duties in paragraph (15).
  - (i) The early start maximum duty period shall be 8 hours.
  - (ii) At units where the two-hour maximum duty period is reduced to 1.5 hours by enhanced relief, all operational duty periods for a controller on an early start commencing before 0600 shall be limited to 1.5 hours (on any operational position whether designated for enhanced relief, or not). For a controller on an early start commencing at or after 0600 (on any operational position whether designated for enhanced relief, or not) the first operational duty period shall be limited to 1.5 hours.
- (14) **Morning Duty** A morning duty is a period of duty that commences between 0630 and 0759 hours.
- (15) **Limits on Morning Duties** In this scheme, where an interval of a minimum of 60 hours or 54 hours between periods of duty is stipulated, that interval may be reduced by up to 30 minutes solely for the purpose of orderly shift Handover.
  - (i) The time taken for orderly handover/takeover before a shift start, up to a maximum of 15 minutes, shall not be considered to form part of the oncoming controller's period of duty.
- (16) **Simulators** Operational and Emergency Continuation Training on simulators and other simulator activity, which may affect a controller's licence, shall be counted the same as operational duty when considered for the purposes of the scheme.
  - (i) Trial and evaluation simulations which take place within periods of duty, or in place of operational duties, may be conducted within the overall limitations of Periods of Duty. However, trial and evaluation simulations which take place within the normal 60 hour or 54 hour intervals between periods of duty shall have an interval of 48 hours between the end of the simulation and the commencement of the next period of duty, or alternatively an interval of 24 hours shall immediately precede and immediately follow such periods of simulator duty.

Note: Simulations which are part of Air Traffic Controller rating training at Air Traffic Control Training Colleges are not subject to the requirements of this scheme.

#### (b) Reporting Breaches of Limitations

- (1) Air Traffic Service Units shall report breaches of the Fatigue Management Scheme to the Governor using the MOR Scheme and as defined by OTAR Part 13. The event types to be reported are but not limited to:
  - (i) Breaches of Prescriptive Limitations as defined in this Appendix.
  - (ii) Breaches of Limitations as defined by the approved Fatigue Risk Management System.
  - (iii) Breaches of any temporary approved roster or Air Traffic Services Unit specific modification.
  - (iv) Any other fatigue related event.

#### (c) Modification of Limitations

- (1) The Governor may at his/her discretion modify any Limitation. Modifications may be made as a requirement of the Governor, or in exceptional or extraordinary circumstances, on the application of an Air Traffic Services Unit. Modification may be made or granted upon such terms and for such duration as the Governor shall specify. In exercising his/her discretion to make or grant a modification, the Governor shall have regard to:
  - (i) the amount, type and complexity of recent and anticipated traffic handled by the unit and position concerned; and
  - (ii) the published operational hours of the unit; and
  - (iii) the pattern of shifts in operation at the time of any shift involved; and
  - (iv) the qualifications and availability of support and supervisory staff; and
  - (v) exceptional temporary staffing problems; and
  - (vi) the equipment in use at the unit; and
  - (vii) factors which may compensate for, or benefits which may arise from, any modification; and
  - (viii) such other matters as the Governor considers to be relevant

#### (d) Ancillary Tasks

- (1) An ancillary task is any task which is not directly associated with the provision of an Air Traffic Service. Air Traffic Service Units shall not normally require controllers to carry out ancillary tasks while they are providing operational Air Traffic Control services.
  - (i) Exceptionally, where such ancillary duties are unavoidable, (e.g. administration, runway inspections, weather observations lighting inspections, opening or closing procedures), the Governor must be satisfied that controllers will not be distracted from their primary function or placed under undue pressure. These duties and the person responsible for discharging them must be clearly identified in the Air Traffic Service Unit's MATS.

#### (e) Operational Support

- (1) Controllers may delegate some of their responsibilities to adequately trained support staff (i.e. Air Traffic Service Assistants) provided they do not include duties for which an Air Traffic Control licence is required. These responsibilities fall into two categories:
  - (i) Air Traffic Control related duties are those closely associated with the safety of aircraft (e.g. Telephone messages concerning flight data and clearances). These duties and the person responsible for discharging them must be clearly identified in the Air Traffic Service Unit's MATS.
  - (ii) Other duties of an administrative nature.
- (2) The Air Traffic Services Unit shall arrange appropriate training and shall be responsible for the continued competence of such staff. The Governor may request details of the training that support staff have received.

#### (f) Management Functions and Responsibilities

(1) The Air Traffic Service Unit shall identify key personnel responsible for the safe operation of the Unit. Their positions, responsibilities, functions, accountabilities and authority must be clearly defined in writing and an organisational chart indicating the specific responsibilities must be provided. Changes in these personnel must be notified to the Governor.

#### (g) Minimum Rest Facilities

- (1) Minimum rest facilities shall consist of a separate room, which is remote from the operations room and reasonably quiet. There shall be sufficient and adequate furniture for the number of staff likely to be on a fatigue break at one time.
- (2) Facilities for obtaining refreshments shall be available within a reasonable distance of the unit or appropriate facilities shall be provided for the storage and preparation of food and drinks.

#### (h) Rosters and Records

- Air Traffic Service Unit shall meet the rostering limitations specified in the Fatigue Management Scheme set out in subparagraph (a) of this Appendix.
- (2) The Air Traffic Service Unit shall notify the Governor of formal rostering arrangements of a repetitive nature only once. However, details of the roster actually worked showing variations due to unforeseen circumstances may be required at the discretion of the Governor, particularly where there is a slight shortfall of staff and overtime is likely.
- (3) Air Traffic Service Units who are unable to set a regular pattern of attendance for ATCOs shall supply to the Governor a copy of the prepared roster at least 30 days before it is due to come into force together with details of each month, or each four-week period, rosters actually worked.

- (4) Rosters supplied to the Governor shall indicate where they meet the various rostering limitations specified in the Prescriptive Limitations set out it in this document. At the request of the Governor, the Air Traffic Services Unit shall supply:
  - (i) Not less than 30 days before it is due to come into force, a copy of any proposed working roster and, without request as early as possible, details of any proposed change.
  - (ii) Not more than 30 days after receiving a request, details of a roster as actually worked including records of the periods of duty worked.

#### (i) Air Traffic Service Unit Modifications

- (1) In exceptional circumstances the Air Traffic Service Unit may in its discretion modify any Limitation through persons exercising its authority. Such modifications may only be made to overcome short-term, temporary and unforeseen difficulties at the unit and may only be made if the safety and effectiveness of Air Traffic Control will be maintained.
- (2) The Governor is required to review the circumstances of each such modification and for this purpose a report and full details of the modification shall be notified in writing, using Appendix G, Report of Operational Duty in excess of Fatigue Limitations (available from the ASSI website(available to download from the ASSI website here <a href="https://www.airsafety.aero/Airports-and-Air-Traffic-Services/Application-Forms/Form Duty Excess FRMS.aspx">https://www.airsafety.aero/Airports-and-Air-Traffic-Services/Application-Forms/Form Duty Excess FRMS.aspx</a>). The completed form should be submitted to the Governor within 24 hours of the modification taking effect.

#### (j) Secondary Employment

- (1) Any employment that involves exercising the privileges of an ATCO licence is subject to the limitations described in this Appendix.
- (2) The Order places responsibility on each holder of an ATCO licence not to act as an ATCO whilst suffering from fatigue to the extent that it may endanger the safety of any aircraft to which the controller is providing a service. Controllers who engage in secondary employment within the required Fatigue Limitation rest periods described in this Appendix may be at risk of failing to meet their responsibilities under the Order. A controller shall not present themselves at work for the purposes of exercising the privileges of their ATCO licence if for any reason, they are likely to suffer from fatigue during the period of duty.
- (3) The ATCU must demonstrate to the satisfaction of the Governor, that adequate measures have been established to ensure that any secondary employment is notified to the ATCU approval holder in advance and is considered in conjunction with their primary ATCO employment for the purposes of complying with the Fatigue Limitations in this Appendix.