

AC

No.: AC/ATS/005R04

Date: 19 April 22

AERONAUTICAL CIRCULAR CIVIL AVIATION AUTHORITY – MACAO, CHINA

SUBJECT: <u>Air Traffic Control Approval Requirements</u>

EFFECTIVE DATE:

1 May 2022

CANCELLATION:

AC/ATS/005R03

GENERAL:

The President of Civil Aviation Authority – Macao, China, in exercise of his power under Paragraph 89 of the Air Navigation Regulation of Macao (ANRM) and Article 35 of the Statutes of Civil Aviation Authority, approved by the Decree-Law 10/91/M, established this Aeronautical Circular (AC).

1 Introduction

In accordance with paragraph 61B of the ANRM, the air traffic control service provider must not provide such a service for Macao airspace unless it has been given and complies with the terms of an air traffic control approval granted by the Civil Aviation Authority – Macao, China (AACM).

The detailed requirements for the approval and operation of organization providing air traffic control service within Macao Aerodrome Traffic Zone are laid down in Appendix A.

The detailed requirements of the ATC On-the-Job Training Instructor and Examiners are laid down in Appendix B.

The requirements prescribed in this AC are the means by which the approved organization will be able to satisfy the AACM as to the fulfillment of the obligations in respect of air traffic control service or the entitlement of the holder to hold and exercise the privileges of the approval.

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The issue of an approval indicates only that the holder is considered competent to secure the safe operation of air traffic control service. The possession of an approval does not relieve the provider of air traffic control service from the responsibility to comply with the ANRM and any other regulations in force.

2 Applicability

This AC applies to the applicant for the grant of an air traffic control approval and the holder of such an approval.

3 Approval Application

An application for air traffic control approval shall be made in a form acceptable to the AACM, and shall contain any information the AACM requires the applicant to submit.

(a) Initial application

A prospective organization who intends to apply for an air traffic control approval shall enter into preliminary discussions with the AACM. The certification process that results in the initial issuance of an air traffic control approval is divided into the following five phases:

- Pre-application phase
- Formal application phase
- Document evaluation phase
- Demonstration and inspection phase
- Certification phase

(b) Application for renewal of air traffic control approval

An Air traffic control approval remains valid for two years or as stated on the approval and will only be renewed provided there is a demonstrated compliance with the regulations applicable to the provision of air traffic services.

An applicant who is the holder of an air traffic control approval must comply with the requirements of the air traffic control approval in this AC. A minimum of 45 days prior to the expiration date, the holder of an air traffic control approval must apply to the AACM for the renewal.

Documents required to be submitted along with the application are:

- Application form (ATC/APP/001 Application for Renewal of Air Traffic Control Approval, which is attached to this AC);
- Copy of existing air traffic control approval;
- Exposition, if amended;

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- The status of the implementation of the corrective action(s) regarding the existing outstanding findings;
- The payment for the renewal of the air traffic control approval according to AACM charging scheme.

-END-

Appendix A

Requirements of Air Traffic Control Approval

Part I General

- 1. Purpose
- 1.1. This Appendix prescribes requirements governing the approval and operation of organization providing air traffic services within the Macao Aerodrome Traffic Zone.
- 2. Procedure compliance
- 2.1. Each person performing duties in relation to an approval shall comply with the applicable procedures specified in the appropriate manuals which authorize the operation.
- 3. Power to Inspect
- 3.1. The holder of an approval shall ensure that any person authorized by the AACM is allowed access to the approval holder's facilities.
- 3.2. The holder of an approval shall ensure that any person authorized by the AACM 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 authorized person, documentation is produced within a reasonable period of time.
- 3.3. The holder of an approval shall ensure that any person authorized by the AACM can request practical demonstrations and tests to verify compliance to this AC.
- 4. Division of air traffic services
- 4.1. Air traffic services shall comprise three services identified as follows:
 - (a) air traffic control service, comprising one or more of the following:
 - (i) Area control service: the provision of air traffic control service for controlled flights, except for those parts of such flights described in paragraphs 4.1 (a) (ii) and (iii); or
 - (ii) Approach control service: the provision of air traffic control service for those parts of controlled flights associated with arrival or departure; or
 - (iii) Aerodrome control service: the provision of air traffic control service for aerodrome traffic, except for those parts of flights described in paragraph 4.1 (a) (ii).
 - (b) flight information service;
 - (c) alerting service.

- 5. The provision of air traffic control service shall include flight information and alerting services.
- 6. Application for approval
- 6.1. An applicant for the grant of an air traffic control approval¹ shall apply to the AACM in the manner required, supplying:
 - (a) the applicant's name and address; and
 - (b) the air traffic service to be provided; and
 - (c) the aerodrome location or airspace designation at, or within which, the service will be provided; and
 - (d) such other particulars relating to the applicant and the intended service as may be required by the AACM; and
 - (e) the exposition required by paragraph 10.
 - (f) payment of any applicable fee required by the appropriate requirements.
- 7. Issue of approval
- 7.1. An applicant may be granted an air traffic control approval if the AACM is satisfied that:
 - (a) the applicant meets the requirements of this AC; and
 - (b) the applicant, and the applicant's senior person or persons required by paragraph 10, are fit and proper persons; and
 - (c) the granting of the approval is not contrary to the interests of aviation safety; and
 - (d) the air traffic control unit shall have been inspected, to the satisfaction of the AACM prior to issue of an approval.
- 8. Privileges of approval
- 8.1. An air traffic control approval shall state:
 - (a) the aerodrome or airspace at, or within which, the service may be provided; and
 - (b) the type of air traffic service which may be provided, as defined in paragraph 4.1.
- 8.2. An air traffic control approval may include such conditions as the AACM may consider appropriate.
- 8.3. The holder of an approval shall comply with the requirements of this AC and provide

¹ Applicant for the grant of an air traffic control approval means an applicant for or the holder of such an approval in this Appendix.

the air traffic service in accordance with those requirements and with any conditions attached to the approval.

- 9. Duration of approval
- 9.1. An air traffic control approval is valid for two years until it is suspended or revoked or for the period of time specified by the AACM and will be subject to such conditions attached to the approval.
- 9.2. The holder of an air traffic control approval that is suspended or revoked shall forthwith surrender the approval certificate to the AACM.

Part II Approval Requirements

- 10. Organization exposition
- 10.1. An applicant for the grant of an air traffic control approval shall provide the AACM with an acceptable exposition containing:
 - (a) a statement signed by the Accountable Manager on behalf of the applicant's organization confirming that the exposition and the appropriate Air Traffic Services Manual:
 - (i) define the organization and demonstrate its means and methods for ensuring safe air traffic services are provided to aircraft and continuing compliance with this and any other applicable regulation; and
 - (ii) are required to be complied with by its personnel at all times; and
 - (b) the titles and names of the senior person or persons required by paragraph 15.1 (a) and (b); and
 - (c) the duties and responsibilities of the senior person or persons specified in paragraph 10.1 (b), including matters for which they have responsibility to deal directly with the AACM on behalf of the organization; and
 - (d) an organization chart showing lines of responsibility of the senior persons specified in paragraph 10.1 (b), and extending to the location listed under paragraph 10.1 (e); and
 - (e) the location of the ATC unit, airspace or aerodrome being served and the services provided; and
 - (f) details of the applicant's staffing structure of the ATC unit; and
 - (g) details of procedures required by paragraph 15 and paragraph 16 regarding the competency, qualifications, maintenance of current operating practice and fitness of personnel; and
 - (h) details of procedures required by paragraph 16 regarding the training and assessment of ATS personnel and the qualifications of ATS training personnel; and
 - (i) details of the systems, procedures, and programs required by paragraph 14 regarding the safety management system; and

- (j) details of the maximum number of hours to be worked by ATS staff required by paragraph 28; and
- (k) procedures to control amend and distribute the exposition.
- 10.2. The holder of an air traffic control approval shall:
 - (a) hold at least one complete, current copy of its exposition at the ATC unit listed in its exposition; and
 - (b) comply with all procedures and standards detailed in its exposition; and
 - (c) make each applicable part of its exposition available to personnel who require those parts to carry out their duties; and
 - (d) continue to meet the standards and comply with the requirements prescribed for approval under this AC.
- 11. Changes to approval holder's organization
- 11.1. The holder of an air traffic control approval shall ensure that its exposition is amended so as to remain a current description of the holder's organization and services.
- 11.2. The approval holder shall ensure that any amendments made to the holder's exposition:
 - (a) meet the applicable requirements of this AC; and
 - (b) comply with the amendment procedures contained in the holder's exposition.
- 11.3. Subject to paragraph 11.4, the approval holder shall provide the AACM with a copy of each amendment to the holder's exposition as soon as practicable after its incorporation into the exposition:
 - (a) printed amendments, at least 15 working days in advance of their effective date; and
 - (b) amendments of an urgent or immediate nature, without delay, and no later than the date on which they are effective.
- 11.4. Where an approval holder proposes to make a change to any of the following, prior notification to and acceptance by the AACM is required:
 - (a) the Accountable Manager; or
 - (b) the listed senior persons; or
 - (c) any aspect of air traffic management that may have an adverse effect on air traffic services provided by agencies responsible for adjacent airspace.
- 11.5. The AACM 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.
- 11.6. 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 AACM as soon as practicable.
- 11.7. The approval holder shall make such amendments to the holder's exposition as the

AACM may consider necessary in the interests of aviation safety.

12. Human Factors

12.1. An applicant for the grant of an air traffic control approval shall ensure that Human Factors aspects are taken into account in the establishment and continuing provision of air traffic services. Areas to be considered include organizational issues, safety management concepts and learning from incident data.

13. Air Traffic Services Manual

- 13.1. An applicant for the grant of an air traffic control approval shall provide, for compliance by its personnel, an Air Traffic Services Manual for the services described in its exposition.
- 13.2. An applicant for the grant of an ATC approval which includes an ATC service or services from more than one location shall provide a Manual specific to each location.
- 13.3. The Air Traffic Services Manual shall meet the requirements laid down in the AC/ATS/004 Air Traffic Service Manual Requirements.

14. Safety Management System

- 14.1. An applicant for the grant of an air traffic control approval shall establish a safety management system appropriate to the size and complexity of the operation, for the proactive management of safety, that integrates the management of operations and technical systems with financial and human resource management, and that reflects quality assurance principles.
- 14.2. The safety management system shall meet the requirements laid down in the AC/GEN/005 Safety Management System Requirements.

15. Personnel requirements

- 15.1. An applicant for the grant of an air traffic control approval shall nominate:
 - (a) a senior person identified as the Accountable Manager who has the authority within the applicant's organization to ensure that each air traffic service listed in its exposition:
 - (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 AC.
 - (b) a senior person or persons who are responsible for ensuring that the applicant's organization provides a safe service to aircraft and complies with the requirements of this AC. Such nominated person or persons shall be ultimately responsible to the Accountable Manager; and
 - (c) sufficient personnel to manage, support and provide safe air traffic services and

any associated training or assessment listed in the applicant's exposition.

- 15.2. The applicant shall establish procedures to:
 - (a) ensure that those personnel who provide the air traffic services hold appropriate current licences and ratings issued under Part IX of the ANRM and in particular that:
 - (i) personnel giving instruction in an operational environment are authorized by the AACM; and
 - (ii) personnel carrying out assessment for the issue of licences or the issue or validation of licence and/or ratings, are approved by the AACM as an examiner.

Refer to Appendix B for detailed requirements of ATC On-the-Job Training Instructor and ATC Examiner.

- (b) facilitate, for air traffic controller licence holders, compliance with the recent experience requirements of Part IX of the ANRM; and
- (c) ensure, as far as practicable, 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 limitations 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.
- (d) ensure that any incidence of an air traffic controller licence or student air traffic controller 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 AACM.
- 16. Training and assessment
- 16.1. An applicant for the grant of an air traffic control approval shall establish training programs and procedures to assess and ensure the initial and continuing competence of operational personnel including continued competence in using new equipment, procedures and updated communications.
- 16.2. The programs and procedures in paragraph 16.1 shall ensure that operational personnel are trained, given regular recurrent training in normal and emergency procedures and are assessed on such.
- 16.3. The management system shall include processes to ensure that prompt action is taken to minimize risk when there is definite evidence that the operational personnel's competence has deteriorated below the required standard.

17. Facility requirements

- 17.1. An applicant for the grant of an air traffic control approval shall establish suitable facilities, including training and assessment facilities, appropriate to the air traffic services listed in the applicant's exposition.
- 17.2. An applicant for approval of an aerodrome control service shall establish procedures to ensure that the aerodrome control tower is:
 - (a) 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 paragraph 17.2 (a); and
 - (c) provided with amenities that ensure the minimum possible interruption to, or degradation of, air traffic services; and
 - (d) provided with equipment for two-way voice communication with:
 - (i) aircraft in or adjacent to airspace for which the applicant has responsibility; and
 - (ii) aircraft, vehicles and persons, on or adjacent to the maneuvering area; and
 - (e) provided with the following minimum equipment, appropriately located:
 - (i) a display system or systems designed to show the disposition of current and pending aerodrome traffic together with ancillary information for individual aircraft; and
 - (ii) appropriate power supplies; and
 - (iii) appropriate and current maps and charts; and
 - (iv) binoculars; and
 - (v) a clock displaying UTC in hours and minutes; and
 - (vi) a logbook; and
 - (vii) an outside temperature indicator; and
 - (viii) a display of the appropriate pressure settings; and
 - (ix) a signal lamp capable of showing green, red and white directed beams; and
 - (x) telephone communications; and
 - (xi) status monitors for any approach and landing aids and any road

- signaling equipment affecting the use of a runway; and
- (xii) visibility checkpoints; and
- (xiii) voice and, where applicable, data recording equipment; and
- (xiv) wind direction and speed display; and
- (xv) an audible alarm to alert the emergency services; and
- (xvi) an AFTN terminal or equivalent equipment; and
- (xvii) airfield lighting controls and indication panel.
- 17.3. The applicant, in support of an ATC facility, shall:
 - (a) ensure that the aeronautical telecommunications equipment required by paragraphs 17.2 are properly installed, commissioned, operated and maintained; and
 - (b) ensure that visual display units used by air traffic services are positioned with due regard to the relative importance of the information displayed and ease of use by the staff concerned; and
 - (c) 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.
 - (d) ensure that clocks displaying UTC in hours and minutes are regularly checked for accuracy to within plus or minus 30 seconds.
- 18. Establishment or transfer of service
- 18.1. An applicant for the grant of an air traffic control approval intending to assume responsibility for providing any air traffic service from an existing approval holder shall include with its application full details of transitional arrangements endorsed by the Accountable Managers of both organizations.
- 19. Withdrawal or transfer of service
- 19.1. The holder of an air traffic control approval who wishes permanently to withdraw an air traffic service shall give the AACM at least 90 days' notice of the proposal and include in that notice a summary of factors considered in arriving at the decision to withdraw the service.
- 19.2. The holder of an air traffic control approval who is the outgoing provider of an air traffic service shall provide all necessary assistance in the preparation and execution of the transitional arrangements required by paragraph 18.

Part III Operating Requirements

20. Continued compliance

- 20.1. The holder of an air traffic control approval shall:
 - (a) continue to meet the standards and comply with the requirements of this AC; and
 - (b) comply with all procedures and programs detailed in its approved exposition and Air Traffic Services Manual; and
 - (c) at each location covered by the approval hold in hard copy, electronic or other form acceptable to the AACM:
 - (i) at least one current copy of the relevant sections of its exposition applicable to the operation; and
 - (ii) make each applicable part of its exposition available to personnel who require those parts to carry out their duties; and
 - (iii) sufficient copies of the Air Traffic Services Manual for one to be readily accessible by all personnel who may need to refer to it.
 - (iv) a process to identify and acceptably mitigate any deficiencies in the requirements that might not be under their control; and
 - (d) notify the AACM promptly of any change of address for service, telephone number or facsimile number.

21. Documentation

- 21.1. An applicant for the grant of an air traffic control approval shall hold copies of the relevant technical manuals and any other document necessary for the provision and operation of the services listed in its exposition.
- 21.2. The applicant shall establish a procedure to control all the documentation required by paragraph 21.1 which shall ensure that:
 - (a) all incoming documentation, including amendments, are reviewed, and actioned as required by authorized personnel; and
 - (b) all documentation is reviewed and authorized before issue; and
 - (c) current issues of all relevant documentation are available to personnel at all locations where they need access to such documentation for the provision and operation of air traffic services; and
 - (d) all obsolete documentation is removed promptly from all points of issue or use; and
 - (e) any obsolete documents retained as archives are suitably identified as obsolete; and
 - (f) changes to documentation are reviewed and approved by authorized personnel who shall have access to pertinent background information upon which to base their review and approval; and

- (g) safety-significant changes are assessed in accordance with the safety management system; and
- (h) the current version of each item of documentation can be identified to preclude the use of out-of-date editions.

22. General information requirements

- 22.1. An applicant for the grant of an air traffic control approval shall establish systems and procedures to ensure that each ATC unit, as appropriate to the area of responsibility, is kept informed of the operational status of operationally significant hazards and facilities.
- 23. Notification of facility status
- 23.1. An applicant for the grant of an air traffic control approval shall establish procedures to notify users of its air traffic services 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.
- 23.2. The procedures shall ensure, as a minimum, that:
 - (a) the users of an air traffic service are notified without delay of any change in operational status of the facility or service that may affect the safety of air navigation and, except where the change is temporary in nature, information concerning any change in operational status is forwarded to the aeronautical information service for promulgation by NOTAM.
- 24. Meteorological information and reporting
- 24.1. An applicant for the grant of an air traffic control approval shall establish systems and procedures to ensure satisfactory provision of meteorological information to each ATC unit. The meteorological information shall be that necessary for the performance of their respective functions, in a form that requires a minimum of interpretation by ATC personnel.
- 24.2. The applicant shall establish procedures to ensure that equipment used in the compilation of routine or special weather reports:
 - (a) supplies data representative of the area for which the measurements are required; and
 - (b) where that equipment consists of multiple wind direction and speed indicators, identifies the runway, or section of the runway, monitored by each instrument.
- 24.3. The applicant shall establish a procedure to ensure that the information contained in a meteorological bulletin remains unchanged through onward transmission.
- 24.4. Procedures shall encourage the transmission to aircraft of meteorological information from a source other than those specified in paragraph 24.1 where it is in the interests of safety, provided that the origin of the information is made clear when doing so.

- 25. Altimeter setting procedures
- 25.1. An applicant for the grant of an air traffic control approval shall establish a procedure to ensure that:
 - (a) altimeter settings are available in hectopascals/millibars; and
 - (b) altimeter settings given in hectopascals/millibars are rounded down to the nearest whole hectopascal/millibar; 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) ATC units provide an aircraft, on request, the current applicable aerodrome or area QNH setting.

26. Watch log

26.1. An applicant for the grant of an air traffic control approval shall ensure that an ATC watch log is kept at every location within a unit from where an ATS is, or may be, provided.

26.2. The procedure shall ensure that:

- (a) the log is maintained by the senior person on duty, or the person on watch at a nominated operating position; and
- (b) the log is maintained throughout the hours of watch of the unit; and
- (c) all entries include the time of entry in UTC; and
- (d) the person responsible for maintaining the log indicates 'On Watch' and 'Off Watch' and that transfer of responsibility is indicated by successive 'On Watch' and 'Off Watch' entries; and
- (e) whatever the format used to maintain the log, entries shall be made in chronological order and, as far as possible, concurrently with the events being recorded; and
- (f) measures shall be taken to ensure that entries made in a log cannot be subsequently be altered or be tampered with any other way.
- (g) actual times of opening and closing watch are recorded in the log; and
- (h) significant events and operational information of note to controllers and unit management is recorded accurately in the log; and
- (i) essential aerodrome information and changes to runway in use; and
- (j) logs are retained for a period of 3 years from the date of final entry.

27. Shift administration

27.1. An applicant for the grant of an air traffic control 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:
 - (i) before providing an ATC service; and
 - (ii) after ceasing to provide an ATC service; and
- (b) for each transfer of watch at an operating position.
- 27.2. An applicant shall provide assurance when combining operating positions into one operating position that the combined operation can fulfil the obligations of the relevant risk.
- 28. Prevention of fatigue
- 28.1. An applicant for the grant of an air traffic control approval shall establish suitable procedures to mitigate the effects of fatigue on ATC operational staff.
- 28.2. The maximum number of hours worked in a given period shall be established and included in the exposition. The requirements laid down in the AC/ATS/001 Scheme of Working Hours of Air Traffic Controllers shall be met.
- 29. Responsibility for control
- 29.1. An applicant for the grant of an air traffic control approval shall establish procedures to ensure that any controlled flight is under the control of only one ATC operating position at any given time.
- 29.2. 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.
- 29.3. The applicant shall establish procedures for the transfer of responsibility for the control of an aircraft which shall ensure that:
 - (a) transfer arrangements are:
 - (i) agreed between ATC units responsible for adjacent airspaces and published in ATC letters of agreement; and
 - (ii) in place for separate operating positions within an ATC unit and promulgated in the holder's of Air Traffic Services Manual; and
 - (b) responsibility for control of an aircraft is not transferred from one ATC unit 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.

- 30. Co-ordination requirements
- 30.1. An applicant for the grant of an air traffic control approval shall establish systems and procedures to ensure, where applicable, effective two-way co-ordination between the ATC unit listed in the applicant's exposition and the following agencies:
 - (a) each ATC unit responsible for adjoining airspace, and
 - (b) any other ATC unit with which regular operational co-ordination may be required.
 - (c) aeronautical telecommunication service; and
 - (d) aviation meteorological services; and
 - (e) aeronautical information services; and
 - (f) aircraft operators; and
 - (g) search and rescue authorities; and
 - (h) where the ATC unit 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 firefighting service.
- 30.2. Procedures shall facilitate both regular and ad hoc communication and take account of any urgent need to pass information.
- 30.3. The procedures shall:
 - (a) detail such matters as are necessary for effective co-ordination between the parties; and
 - (b) be kept current; and
 - (c) be supported by a written agreement signed by senior representatives of the parties involved; and
 - (d) be part of the applicant's Air Traffic Services Manual.
- 30.4. The procedures shall ensure in particular that ATC units and aircraft operators, where they require the information, are provided, through the exchange of ATS messages, with details of:
 - (a) the intended movement of each aircraft for which a flight plan has been filed, and any amendments to that flight plan; and
 - (b) current information on the progress of the flight.
- 30.5. ATS messages shall be prepared and transmitted in accordance with the procedures detailed in AC/ATS/006 Manual of Standards Air Traffic Management.

- 31. Service disruption and contingency plans
- 31.1. An applicant for the grant of an air traffic control approval shall establish plans to implement in the event of disruption or potential disruption of air traffic services and related supporting services in airspace for which they intend to be responsible for providing such services. Procedures, in addition to any requirements in AC/GEN/003 Mandatory Occurrence Reporting Scheme, shall be established to:
 - (a) advise the AACM of any planned disruption to the provision of air traffic services; and
 - (b) investigate any unplanned disruption to the provision of air traffic services; and
 - (c) report to the AACM, within 48 hours of the occurrence, the circumstances surrounding any unplanned disruption to air traffic services.
- 31.2. 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 agencies which may be affected or whose participation is necessary for effective implementation of the plan.
- 31.3. Contingency plans shall take into account the guidance material contained in Attachment C of ICAO Annex 11 and AC/ATS/006 Manual of Standards Air Traffic Management. 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 ATS Manual.
- 31.4. Contingency plans shall include provision for notifying appropriate personnel of its existence, amendments to it and the means of activating it.
- 31.5. Contingency plans shall be reviewed at frequent intervals and when any operational change is planned to ensure their currency and continued efficacy.
- 32. Runway Safety Programme
- 32.1. The provider of an Air Traffic Service shall develop a runway safety programme.
- 32.2. The runway safety programme shall include provisions regarding the use of radiotelephony, phraseology, language proficiency, ATS procedures, aerodrome lighting and marking, situational awareness and human factors.
- 33. Incidents and accidents
- 33.1. An applicant for the grant of an air traffic control approval shall establish procedures to be adopted following an incident or accident.
- 33.2. The procedures shall cover:
 - (a) the action required to determine whether any air navigation facilities may have contributed to the event and any subsequent action; and
 - (b) the process to be followed when an air traffic controller's licence holder is involved in an incident or accident.
 - (c) the notification, investigation and reporting of incidents and accidents in

- accordance with AC/GEN/002 Rules Concerning Aeronautical Accidents and Incidents; and
- (d) the preservation and retention of records, required under AC/GEN/002 Rules Concerning Aeronautical Accidents and Incidents, to assist any investigation.

34. Records

- 34.1. An applicant for the grant of an air traffic control approval shall establish systems and procedures to identify, collect, file, store securely, maintain, access and dispose of records necessary for:
 - (a) the operational provision of air traffic services; and
 - (b) the purpose of assisting with any accident or incident investigation.

34.2. The records shall include:

- (a) telephone communications; and
- (b) radio broadcasts and communications; and
- (c) air-ground digital data exchanges, where appropriate; and
- (d) surveillance information, where appropriate; and
- (e) filed flight plans including standard and repetitive plans; and
- (f) flight progress strips; and
- (g) staff duty rosters; and
- (h) appropriate meteorological and aeronautical information, except where the information is retained for an equivalent period by a meteorological or AIS organization.
- 34.3. The erroneous information on written records can be corrected by drawing a single line through such information and initialing the correction.
- 34.4. The applicant shall establish procedures to ensure that the records referred to in paragraph 34.2 are retained for at least 30 days from the date of entry, except for:
 - (a) staff duty rosters, which shall be retained for at least 3 years; and
 - (b) written records associated with the requirements of paragraph 31.1 (b) and (c) which shall be retained for 3 years; or
 - (c) any record required under AC/GEN/002 Rules Concerning Aeronautical Accidents and Incidents to be kept for a longer period following an accident or incident.

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Appendix B

Requirements of ATC On-the-Job Training Instructor& Examiner

Part I General

1. Definitions

ATC Examiner means an air traffic controller holding a license and valid rating, who is authorized by the AACM to carry out examinations in the operational environment for which the rating is issued.

ATC On-the-Job Training Instructor (OJTI) means an air traffic controller holding a license and valid rating, who is authorized by the AACM to carry out instruction in the operational environment for which the rating is issued.

On-the-Job Training means the integration in practice of previously acquired job related routines and skills under the supervision of a qualified On-the-Job Training Instructor in a live traffic situation.

2. Application Procedures

2.1 The application of ATC OJTI or Examiner shall be nominated by the Air Traffic Services Provider. The documents which demonstrate the nominated persons meet the requirements laid down in this Appendix are required. The AACM may request the applicant to provide further supporting documents when necessary.

Part II Requirements of ATC On-the-Job Training Instructor

- 3. The air traffic services provider is responsible for providing the operational training to its controllers / student controllers. Suitably qualified ATC license holders shall be authorized by AACM as On-the-Job Training Instructor (OJTI) to supervise personnel provides an air traffic control service in the operational environment.
- 4. Requirements for the ATC OJTI
- 4.1 Prior to the air traffic services provider nomination as an ATC OJTI, the applicant must:
 - (a) hold a valid ATC license for a minimum of three years; and
 - (b) have successfully completed an instructor course approved to the AACM.

- 5. Privileges of an ATC OJTI
- 5.1 An OJTI is entitled to supervise student and trainee air traffic controllers while they provide an air traffic control service for which they do not hold a valid rating.
- 5.2 An OJTI shall only supervise student and trainee air traffic controllers while they are providing an ATC service for which he holds a valid rating.
- 6. Roles and Responsibilities
- 6.1 On-the-job Training Instructors

The OJTI shall be responsible for:

- (a) the safety of the air traffic control service that the student or trainee air traffic controller is providing under his supervision;
- (b) determining and reporting on the training progress;
- (c) identifying any deficiencies in knowledge or skill and recommending remedial training;
- (d) recommending student and trainee air traffic controllers as being at an appropriate level of competence where they should be successful at a license examination;
- (e) providing specific training to controllers for improving his/her practical skill level;
- (f) supervising controllers who have had their rating suspended.
- 6.2 Air Traffic Services Provider
- 6.2.1 Air traffic services providers must have processes and to ensure that OJTIs:
 - (a) are authorized by the AACM to provide the air traffic control services in which they are supervising student or trainee air traffic controllers;
 - (b) are competent to supervise student or trainee air traffic controllers;
 - (c) have exercised the privileges at least once every three years in the operational environment / simulation training;
 - (d) are assessed at least every three years for their ongoing competence to train and supervise student or trainee air traffic controllers.
- 6.2.2 Air traffic services provider shall ensure that an OJTI is permitted to provide an air traffic control service without any training responsibilities, for sufficient time to remain competent on the operating positions for which he provides on-the-job training.
- 6.2.3 An OJTI who is assessed as no longer competent to train and supervise student or trainee air traffic controllers shall not undertake duties as an OJTI until he has been assessed as competent to do so. Should a controller be unable to demonstrate competence as an OJTI, the OJTI duties shall be removed immediately and inform the AACM accordingly.

- 7. Duration and renewal of AACM ATC OJTI authorization
- 7.1 The ATC OJTI Authorization is valid for three years. It is renewable by an assessment of the OJTI's competence to continue to provide the operational environment / simulation training to the controllers / student controllers.

Part III Requirements of ATC Examiner

- 8. This authority delegated to ATC Examiners on behalf of the AACM to conduct the competence checks associated with the issue and maintenance of ATC licenses.
- 9. Requirements for the ATC Examiner
- 9.1 Prior to the air traffic services provider nomination as an ATC Examiner, the applicant must:
 - (a) hold a valid ATC license for a minimum of three years; and
 - (b) have successfully completed a training course approved by the AACM; and
 - (c) provide evidence of having completed supernumerary duties to the satisfaction of the AACM, including being a member of license examination Jury or being an ATC OJTI; and
 - (d) provide evidence of having successfully completed demonstration check.
- 10. Privileges of an ATC Examiner

An ATC Examiner is entitled to conduct examinations associated with the ATC license. The AACM may authorize ATC Examiner to entitle him to conduct one or more of the following:

- (a) license examinations leading to the issue of an air traffic controller license and rating;
- (b) annual recurrent competence assessments;
- (c) competence assessments for controller with provisionally suspended or suspended rating.

Note: Normally, the initial authorization of ATC Examiner is limited to (b) and (c).

- 11. Roles and Responsibilities
- 11.1 ATC Examiners

The ATC Examiners shall be responsible for determining whether:

(a) student air traffic control licence holders are competent to provide the air traffic

- control service for which they are being examined towards the grant of an ATC licence and associated rating; and
- (b) controllers and trainee air traffic controllers he is examining are competent or not competent to exercise the privileges of their ATC licenses and ratings.
- 11.2 Air Traffic Services Provider
- 11.2.1 Air traffic services provider must have processes, procedures and competent personnel to ensure that:
 - (a) there are appropriate number of suitably qualified ATC Examiners;
 - (b) the ATC Examiners hold valid ratings appropriate to the examinations they are conducting;
 - (c) the ATC Examiners are competent to conduct the examinations;
 - (d) each ATC Examiner conducted at least three examinations/checks in each year;
 - (e) the AACM has been informed of each examination to be conducted by the ATC Examiners.
- 11.2.2 An ATC Examiner who is assessed as no longer competent to conduct examinations shall not undertake duties as an examiner until he has been assessed as competent to do so. Should a controller be unable to demonstrate competence as and ATC Examiner, the ATC examiner duties shall be removed immediately and inform the AACM accordingly.
- 12. Duration and renewal of ATC Examiner authorization
- The initial ATC Examiner Authorization is valid for one year. It is renewable by an assessment of the Examiner's competence to continue to conduct examinations for the ATC licence. The renewal of Authorization is issued for a 2-year period.

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澳門特別行政區 REGIÃO ADMINISTRATIVA ESPECIAL DE MACAU



Application for Renewal of Air Traffic Control Approval

Section 1. General Information	
Company registered name	
Trading name (if different from Company registered r	
Address:	
Telephone:	
Fax:	
E-mail:	
Aerodrome(s), ATC Unit(s) where Air Traffic Service to be provided	
Section 2. Documents Submission Checklist	
Organization Exposition (pages modified in	n previous revision, if any)
☐ Yes (Attached to this form)	□ No
2. Status report of Corrective Action(s)☐ Yes (Attached to this form)	□ No
3. Copy of existing ATC Approval	
☐ Yes (Attached to this form)	□ No

Section 3. Declaration by the Accountable Manager

Declaration

- I hereby declare that to the best of my knowledge the particulars entered on this application are accurate.
- I agree to pay the charges payable on application in accordance with the AACM Charging Scheme.

Name (BLOCK LETTERS):
Position in company:
Signature:
Date:

Note: This part is to be completed by an accountable person who holds responsibilities for Air Traffic Control Approval matters.