Advisory Circular

AC65-8.2

**Air Traffic Service Personnel Licences and Ratings—
Flight Service Operator Ratings–
Aerodrome Flight Information Rating**

Revision 2

11 May 2016

General

Civil Aviation Authority Advisory Circulars contain information about standards, practices, and procedures that the Director has found to be an acceptable means of compliance with the associated rule.

An acceptable means of compliance is not intended to be the only means of compliance with a rule, and consideration will be given to other methods of compliance that may be presented to the Director General. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate Advisory Circular.

An Advisory Circular may also include guidance material to facilitate compliance with the rule requirements. Guidance material must not be regarded as an acceptable means of compliance.

Purpose

This material is intended for applicants for air traffic service personnel licences and ratings, holders of air traffic service personnel licences and ratings, air traffic services instructors, air traffic service examiners, training organisations, and air traffic service organisations.

Related Rules

This Advisory Circular relates specifically to Part 65 Subpart H *Air Traffic Service Personnel Licences and Ratings– Flight Service Operator Licences – Aerodrome Flight Information Rating*.

Change Notice

Subject to "Memorandum for Technical Cooperation" between the CAA of Mongolia and New Zealand on mutual cooperation in implementation of Assembly Resolution A29-3: Global Rule Harmonization, 29th ICAO Assembly, 1992, which urges States to promote global harmonization of national rules, dated 6th of May, 1999, Mongolian Civil Aviation Safety Regulation has been reconciled to the Civil Aviation Regulation of New Zealand.

Amendment 164 of Annex 1 to the Chicago Convention on International Civil Aviation urges flight crew members, ATC personnel and aircraft maintenance engineers to comply with the language proficiency requirements; and

Under Article 14 of the Civil Aviation Law of Mongolia 1999, "Use of foreign language in civil aviation" the AC has been released in English version only, in order to prevent any mistranslation and misuse of the aviation safety related documents.

This AC 65-8.2 was developed based on NZAC 65-8.2 revision 2, dated on 08 December 2014.

Table of Contents

Introduction

Part 65 *Air Traffic Service Personnel Licences and Ratings* prescribes rules governing the issue of air traffic service licences and ratings, the conditions under which those licences and ratings are necessary, and the privileges and limitations of those licences and ratings.

This Advisory Circular forms part of a series of Advisory Circulars that supports these rules - one for each required rating.

Advisory Circular Intent and Process

This Advisory Circular provides guidance on how to comply with Part 65 Subpart H *Air Traffic Service Personnel Licences and Ratings– Flight Service Operator Licences – Aerodrome Flight Information Rating*.

Subpart H - Flight Service Operator Ratings - Aerodrome Flight Information Rating

65.353 Eligibility

Rules 65.353 (1) and (2) require an applicant for an aerodrome flight information rating to hold a flight service operator licence and to have passed examinations relevant to the rating and validation. Successful attainment of the written syllabus given in Appendix A of this Advisory Circular would meet this requirement.

APPENDIX A - Subject No 110 - Aerodrome Flight Information Rating

Syllabus

Each subject has been given a subject number and each topic within that subject a topic number. These reference numbers may be used on 'knowledge deficiency reports' and will provide valuable feedback to the examination candidate.

Sub Topic   Syllabus Item

Air Traffic Services

110.2   **General**

110.2.2   Explain the objectives of air traffic services.

110.2.4   State the categories air traffic services are divided into.

110.2.6   Describe the general parameters for coordination between air traffic services and aircraft operator representatives.

110.2.8   Define air traffic control service.

110.4   **Flight information service**

110.4.2   Define flight information service (FIS).

110.4.4   Describe the scope of the flight information service.

110.4.6   Explain the responsibility for the provision of the flight information service.

110.4.8   State the responsibility for the provision of an aerodrome flight information service unit.

110.4.10   Describe the information passed to a flight on first contact.

110.4.12   Explain the purpose of traffic information.

110.4.14   Describe aerodrome traffic information including appropriate phraseologies.

110.4.16   Explain the requirements for new or amended flight information to effected aircraft.

110.4.18   Describe the specific elements of flight information for VFR flights.

110.4.20   Describe the requirements for exchange of movement data for non-controlled flights.

110.4.22   Describe the actions and requirements on receiving pilot reports on significant weather.

110.4.24   Describe the methods of dissemination of the flight information service to aircraft in-flight and who is responsible.

110.4.26   Describe procedures for dissemination of NOTAM information and SIGMET reports, including the compilation of such reports.

110.4.28   Describe the practices and services of the Meteorological Service.

110.4.30   Describe the mandatory meteorological information passed to aircrew.

110.4.32   Describe the meteorological information passed to aircrew on request.

110.4.34   Describe the process to access ATIS information, including updating and procedures when unavailable.

110.4.36   State the priorities in the provision of an air traffic control service and a flight information service.

110.4.38   Describe the responsibilities of an aerodrome flight information service unit.

110.4.40   Describe the contents of aerodrome traffic information including where it applies and examples of phraseologies used.

110.6   Alerting service

110.6.2   Define the alerting service.

110.6.4   Describe the scope of the alerting service.

110.6.6   Explain the responsibility for the provision of the alerting service.

110.6.8   Explain the alerting service emergency phases.

110.6.10   Explain the initial checks carried out to confirm the operational status of an aircraft.

110.6.12   Define SARTIME.

110.8   Aerodrome emergencies

110.8.2   Describe the purpose of the aerodrome emergency plan.

110.8.4   Describe the aerodrome emergency phases and the procedures for each of these.

110.8.6   Explain in general terms the use of references available for use during emergencies, including telephone lists, forms, checklists and grid maps.

110.8.8   Describe the emergency alerting equipment and communication facilities.

110.8.10   Describe the documents stating actions during and after an emergency event.

110.8.12   Describe the actions taken in the following situations:

(a)   MAYDAY call from pilot
(b)   PAN call from pilot
(c)   notification of emergency from another source.

110.8.14   Describe the actions for closing watch with regards to alerting services provided to aerodrome traffic.

110.8.16   Describe the procedure for isolating an aircraft believed to be the subject of unlawful interference.

 Coordination and Clearance Delivery

110.10   ATS movement and control messages

110.10.2   Describe the different ATS movement and control messages.

110.10.4   Explain the process for transmission of ATS messages.

110.10.6   Describe the categories of ATS messages and their priorities.

110.10.8   Describe the addressing of ATS messages.

110.10.10   Describe the process for exchange of movement data in respect of non-controlled flights between ATS units and the following operating positions from:

(a)   aerodrome flight information service to ACC/FIC sector(s)
(b)   ACC/FIC sector(s) to aerodrome flight information service units
(c)   sectors/units to Aeronautical Briefing Office.

110.10.12   Explain the elements of flight and/or other information required to be exchanged between the following:

(a)   from aerodrome flight information service units, where applicable to approach control
(b)   from approach/aerodrome flight information service units to units responsible for the provision of flight information service
(c)   between units responsible for the provision of flight information service.

110.10.14   Describe the processes for handling emergency messages including acknowledgement.

110.10.16   Describe the different movement and control messages for IFR flight plans, including:

(a)   FPL messages
(b)   CPL messages
(c)   international departures that return or abort take-off.

110.10.18   Describe the requirements for flight plan distribution for IFR flight plans.

110.10.20   Describe the different movement and control messages for VFR flight plans, including:

(a)   domestic flights
(b)   international flights.

110.10.22   Describe the requirements and meaning of the following flight plan and associated update messages:

(a) delay
(b) modification
(c) flight plan cancellation
(d) departure – IFR
(e) departure – VFR domestic, VFR international
(f) arrival
(g) termination of domestic VFR flight plans.

110.10.24   Describe the meaning and requirements of coordination messages for:

(a) current flight plan
(b) estimate
(c) coordination
(d) acceptance
(e) logical acknowledgement
(f) logical rejection
(g) FDPS coordination
(h) flight plan messages and associated update.

110.10.26   Describe the requirements for the following supplementary messages:

(a) request flight plan
(b) request supplementary flight plan
(c) supplementary flight plan.

110.10.28   Describe the following control messages:

(a) clearance
(b) transfer of control
(c) position report and air report.

110.12   Flight planning

110.12.2   Describe the procedures for the submission of a flight plan.

110.12.4   Describe the procedures prior to departure.

110.12.6   Describe the delay procedures for a flight plan.

110.12.8   Describe the procedures for accepting a flight plan.

110.12.10   Describe the procedures for the completion of the flight plan form.

110.12.12   Describe the process for acceptance and actioning of VFR flight plans both domestic and international.

110.12.14   Describe the procedure for cancellation and changes to VFR flight plans.

110.12.16   Describe the procedures for acceptance of IFR flight plans including dissemination and updating of electronic plans.

110.12.18   Describe the procedures for the extraction of relevant data for pre-flight information.

110.14   Coordination and ATC clearances

110.14.2   Describe the sector coordination requirements with adjacent approach sectors.

110.14.4   Describe the sector coordination requirements with adjacent area sectors.

110.14.6   Describe the sector coordination requirements with adjacent FIS areas.

110.14.8   Define ATC clearance.

110.14.10   Describe the following conditions regarding an ATC clearance:

(a)   validity
(b)   elements and what they are required to achieve
(c)   who requires a clearance
(d)   when it can be denied or withheld
(e)   methods for issuing, including relay through another agency.

110.14.12   List the elements of an ATC clearance that must be read back in full by a pilot.

110.14.14   List the objectives for instructions contained in an ATC clearance for an IFR flight.

110.14.16   Define the term 'clearance limit' for an IFR flight.

110.14.18   Describe procedures to follow in the event of unavailability of route and/or cruise level elements of an ATC clearance, including the phraseologies to be used.

110.14.20   Describe the procedures associated with route instructions, including:

(a)   standard route clearances
(b)   route description, use of flight planned route
(c)   actions to be taken in the event of hazardous weather conditions
(d)   revised route instructions
(e)   direct routing and unevaluated routes.

110.14.22   State the aerodrome flight information unit responsibilities for the relay of clearances including appropriate phraseologies.

Aerodrome Flight Information Service

110.16   Aerodrome flight information environment

110.16.2   Describe the geography and general weather of the aerodrome flight information environment, including:

(a)   topography and local weather patterns
(b)   locations of airfields and directions of runways
(c)   rivers, towns, and prominent features.

110.16.4   Define the area of responsibility for the flight information aerodrome sector.

110.16.6   Derive from appropriate maps and charts relevant information, including adjacent airspace/sectors:

(a)   controlled airspace and airspace classification
(b)   general aviation areas and special use airspace
(c)   holding patterns, reporting points and navigation aids
(d)   surveillance (radar) sites and performance
(e)   frequencies.

110.16.8   State the aerodrome licensee and explain the operational agreements with the aerodrome licensee.

110.16.10   State the location and purpose of the aerodrome reference point.

110.16.12   Define the following:

       (a)   aerodrome reference point
       (b)   manoeuvring area
       (c)   TORA
       (d)   TODA
       (e)   LDA
       (f)   accelerate-stop distance.

110.16.14   Derive from appropriate publications the location of the following:

       (a)   aerodrome elevation
       (b)   boundaries of aerodrome.

110.16.16   State the runway directions and any restrictions on use.

110.16.18   Describe the purpose of stopways and clearways.

110.16.20   Describe the surface material and dimensions of the runways, stopways and clearways.

110.16.22   Explain the type and purpose of runway markings.

110.16.24   Explain the restrictions and procedures associated with taxiways including physical dimensions and markings.

110.16.26   Describe the holding points.

110.16.28   State the pavement strength classification.

110.16.30   Explain the method of marking unserviceable areas.

110.16.32   Describe the airfield lighting system, including:

       (a)   runway
       (b)   taxiway
       (c)   approach
       (d)   apron
       (e)   aerodrome beacon
       (f)   displaced threshold and reduced length operation
       (g)   LVO lighting

(h)   flood lighting

(i)   hazard

(j)   obstructions

(k)   beacons

(l)   VASI

(m) PAPI

(n)   method of control

(o)   inspection

(p)   reporting of unserviceability.

110.16.34   Describe the requirements for airfield lighting, including specified time of operation, intensity setting by day and night and intensity variation at pilot's request.

110.16.36   Explain in general terms the layout of the aerodrome, including where applicable:

(a)   location of aerodrome users

(b)   windsocks

(c)   aircraft parking

(d)   RFS station and associated equipment

(e)   emergency staging and dispersal areas

(f)   apron roadway(s)

(g)   restricted zones

(h)   engine run bay

(i)   VOR check points.

110.16.38   Describe the performance characteristics of common aircraft operating within the aerodrome flight information environment, including:

(a)   rates of climb/descent and maximum/minimum speeds

(b)   deterioration/variation of weather effecting aircraft operation

(c)   local operators, designators and procedures.

110.16.40   Describe the aerodrome traffic circuit, including standard altitude, direction and provisos for the use of non-standard circuits.

110.16.42   Describe the arrival procedures for IFR and VFR aircraft.

110.16.44   Describe the departure procedures for IFR and VFR aircraft.

110.16.46   Explain the process to follow for runway changes.

110.16.48   Describe factors taken into consideration when selecting runway in use, including procedures for use of different runways.

110.16.50   State the runway designator phraseology.

110.18   Aerodrome flight information service procedures

110.18.2   Explain the aerodrome operating procedures for IFR aircraft, including:

(a)   route structure, including SIDs, STARs.
(b)   inbound/outbound traffic flow
(c)   holding requirements
(d)   descents, including minimum descents and terrain clearance
(e)   runway changes procedures.

110.18.4   Describe the aerodrome FIS unit specific responsibilities including the operation of positions within the unit.

110.18.6   Describe the information to be passed to aerodrome traffic, including:

(a)   start-up advice
(b)   local traffic information.

110.18.8   Describe the procedures and light signals used for NORDO aircraft, including recall of departing NORDO aircraft.

110.18.10   Describe light signals to be used in the event of a communication failure with personnel or a vehicle.

110.18.12   Describe the responsibility for runway inspections including their frequency and reporting requirements.

110.18.14   Describe the criteria for closing a runway due to close proximity of vehicles or other obstructions.

110.18.16   Describe the work zone at the aerodrome.

110.18.18   State what is meant by 'No Ops Area' and identify where you would locate this information.

110.18.20   Describe the procedures when unauthorised operations are sighted or reported to the aerodrome controller.

110.18.22   Describe the process to follow in the event unauthorised operations are observed.

110.18.24   Explain the procedures required for operation of moored balloons and kites, model aircraft and gyro gliders and parasail (including kite surfers).

110.18.26   Describe the process when an abnormal aircraft configuration or condition is observed or reported.

110.18.28   Describe the requirements for passing information on aircraft status.

110.18.30   Explain wake turbulence and how it affects aircraft.

110.18.32   Describe the wake turbulence categories.

110.18.34   Explain the tools used for implementing ATFM.

110.18.36   Describe the additional procedures in common with aerodrome control.

110.18.38   Describe the procedures for establishing and maintaining visual identity for an aircraft entering the traffic circuit.

110.18.40   Describe the use of ATS surveillance systems by flight service operators.

110.18.42   List the phrases available to describe aerodrome surface conditions.

110.18.44   Describe the local cloud and visibility check points.

110.18.46   State the information that ATS shall pass to aircraft:

(a)   prior to taxing for take-off
(b)   prior to take off.

110.18.48   State the meteorological reports to be passed to arriving VFR flights.

110.18.50   State the weather elements changes required for updating the take-off and/or landing reports.

110.18.52   State when there is a requirement to pass significant changes and variation in take-off and landing reports.

110.18.54   Explain the aerodrome FS unit's flight progress system.

110.18.56   Describe the flight progress board, display of meteorological and NOTAM information.

110.18.58   Describe the recommended techniques used for scanning all information available on the CWP.

110.18.60   Describe the requirements for an adequate pre duty briefing.

110.18.62   Describe the procedures for opening or taking over a watch.

110.18.64   Describe the procedures for closing or handing over watch, including a list of items to be included in the handover.

110.18.66   Describe the tower's equipment check requirements and use of ATS position log strip.

110.18.68   Describe the adjacent sectors off watch procedures.

110.18.70   Explain the procedures for determining hours of service including how they are promulgated and extension to hours of service.

110.18.72   Describe the overall requirements for staffing at ATS operating positions.

110.18.74   Explain the use of and requirements for keeping an air traffic services log.

110.18.76   Describe the personnel licensing requirements for this rating including the training plan objectives.

110.18.78   Explain the feedback/ assessment mechanisms available for a trainee within the training plan for this rating.

110.18.80   Describe the recent experience requirements for exercising an aerodrome flight information rating.

110.18.82   Describe the requirements for ATS personal log books.

110.18.84   State where you would locate information relating to the acquisition, retention, dissemination, relinquishment and release of records by ATS units.

110.20   Emergencies

110.20.2   Describe the procedures for closure of an aerodrome, including where you would locate this information.

110.20.4   Explain actions taken in the event evacuation from work place is required, including traffic recovery.

110.20.6   State where you would locate information on procedures and initial actions for handling aviation accidents and incidents.

110.20.8   State where you would locate documentation for handling unusual/emergency situations.

Equipment

110.22   ATS equipment

110.22.2   Describe in general terms the responsibilities and requirements of the aeronautical telecommunications system.

110.22.4   Describe the operation of the AFTN.

110.22.6   Explain in general terms the equipment available in the aerodrome flight service unit, including where applicable:

(a)   VDF – including accuracy check and operating procedures
(b)   navigational aids, including monitoring facilities
(c)   met display unit, met coder
(d)   QNH pressure sources
(e)   aeronautical ground lights
(f)   vaisala
(g)   AFTN
(h)   standby radios
(i)   E strips
(j)   strip printer
(k)   signal lamp

   (l) clock

   (m) cell phone and pager

   (n) remote camera operation

   (o) gate allocation display

   (p) situation data display

   (q) phones, PC and fax.

110.22.8 Describe the requirements for monitoring the status of equipment facilities.

110.24 ATS equipment failure

110.24.2 Explain how to recognise system degradation or complete failure of ATS equipment, including but not limited to:

   (a) flight data processor (FDP)/radar data processor (RDP) systems

   (b) navigation aids including monitoring facilities

   (c) voice communication system

   (d) main and standby power supply

   (e) equipment on controller work position (CWP)

   (f) met display unit

   (g) QNH pressure sources

   (h) aeronautical ground lights

   (i) VDF – including accuracy check and operating procedure.

110.24.4 Describe the notification process in the event of equipment failure.

110.24.6 Describe the procedures to be followed in the event of a partial or total ground-ground voice communication system (VCS) equipment failure.

110.24.8 Describe the effects on operation of a power failure, including reference to UPS/generator back up.

110.24.10 Describe in general terms the effect on operations of the total failure of the AFTN.