



Civil Aviation Authority

CAR-ATCO

Civil Aviation Regulation

Air Traffic Controller Licensing & ATC Training Organizations

Effective 20 July 2023

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President of CAA**

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FOREWORD

- (a)** The Civil Aviation Requirements for Civil Aviation Regulation Enforcement Procedures have been issued by the Civil Aviation Authority of Oman – DGCAR (hereinafter referred to as “the AUTHORITY”) under the provisions of the Civil Aviation Law of the Sultanate of Oman.
- (b)** This CAR has been modelled upon similar regulations implemented by other member States and includes the subject matter endorsed within ICAO Annex 1, Personnel Licensing.
- (c)** CAR ATCO shall have the following scope:
 - 1)** The new CAR ATCO regulation will ensure compliance with all ICAO Annex 1 SARPs required to be complied with for the licensing and training of Air Traffic Controllers.
 - 2)** The regulation shall be divided into three parts.
 - Part I- General requirements
 - Part II- ATCO addresses the requirements for the licensing of Air Traffic Controllers.
 - Part III- ATCO OR addresses the requirements for the ATC training organizations.
 - 3)** CAR ATCO shall only exercise its domain for the SARPs related to ICAO Annex 1 and will be formulated with reference to various ICAO documents related with the subject matter. The CAR ATCO shall not interfere or conflict within the domain of any other department with responsibility over other ICAO Annexes.
- (d)** Amendments to the text in CAR ATCO in subsequent editions will be added in the amendment table contained within.
- (e)** The editing practices used in this document are as follows:
 - 1)** ‘Shall’ and ‘Must’ are used to indicate a mandatory requirement and may appear in this CAR.
 - 2)** ‘Should’ is used to indicate a recommendation.
 - 3)** ‘May’ is used to indicate discretion by the AUTHORITY, or the industry as appropriate.
 - 4)** ‘Will’ indicates a mandatory requirement and is used to advise of action incumbent on the AUTHORITY.

Note: The use of the male gender implies the female gender and vice versa.

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PART I: ATCO - GENERAL REQUIREMENTS

SUBPART A – GENERAL

CAR.ATCO.001 Applicability

- (a) This Part applies to all Oman Air Traffic Controller Licence holders and Student Air Traffic Controller Licence holders providing Air Traffic Services under approved Air Navigation Service Providers (ANSPs).
- (b) This subpart applies to Oman approved training organizations (ATO) providing approved training for the issue of Student Air Traffic Controller Licence, Air Traffic Controller Licence, ATC ratings and endorsements and; to applicants, who undergo a complete and approved course/s of training from a CAA approved ATO conducting a complete basic Licence and ratings courses subsequent to completing the required experience requirements as specified in this chapter.
- (c) This Chapter also applies to holders of a foreign ATC licence employed by an Oman ANSP and seeking to convert their foreign licences.

CAR.ATCO.003 Scope

This Part establishes the requirements for the issue, revocation and suspension of student air traffic controller licences and air traffic controller licences, their associated ratings and endorsements, and the conditions of their validity and use. When the term licence is used alone in this part, it shall mean the Air Traffic controller licence and Student Air Traffic controller licence.

CAR.ATCO.005 Entry into force

- (a) This CAR shall enter into force from the day of its publication and shall become applicable on 5th August 2023.
- (b) The standards prescribed in this Regulation are required to be complied with by personnel holding student air traffic controller licences, air traffic controller licences, Air Navigation Service Providers (ANSPs) and approved training organizations (ATO) with privileges for provision of approved training for air traffic controllers.

CAR.ATCO.007 Definitions

- (a) The definitions listed here are applicable for:
 - PART I: GENERAL REQUIREMENTS
 - PART II: ATCO - REQUIREMENTS FOR THE LICENSING OF AIR TRAFFIC CONTROLLERS
 - PART III: ATCO.OR - REQUIREMENTS FOR AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS
- (b) Definitions associated with this regulation are contained in CAR 1.

Abnormal Situation. means circumstances, including degraded situations, which are neither routinely nor commonly experienced and for which an air traffic controller has not developed automatic skills;

Adapted competency model. A group of competencies with their associated description and performance criteria adapted from an ICAO competency framework that an organization uses to develop competency-based training and assessment for a given role.

Air Traffic Control (ATC) service. means a service provided for the purpose of: (a) preventing collisions: — between aircraft, and — in the manoeuvring area between aircraft and obstructions; and (b) expediting and maintaining an orderly flow of air traffic;

Air Traffic Service Providers. means any public or private entity providing air traffic control services for general air traffic;

Air Traffic Control (ATC) unit. means a generic term meaning variously, area control centre, approach

control unit or aerodrome control tower;

Assessment. means an evaluation of the practical skills leading to the issue of the licence, rating and/or endorsement(s) and their revalidation and/or renewal, including behaviour and the practical application of knowledge and understanding being demonstrated by the person being assessed;

Assessor Endorsement. means the authorisation entered on and forming part of the licence, indicating the competence of the holder to assess the practical skills of student air traffic controller and air traffic controller;

Approved training. Training conducted under special curricula and supervision approved by a Contracting State.

Approved training organization. An organization approved by and operating under the supervision of a Contracting State in accordance with the requirements of Annex 1 to perform approved training.

ATS surveillance service. A term used to indicate a service provided directly by means of an ATS surveillance system.

ATS surveillance system. A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft

Competency. A dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviours that mobilize the relevant knowledge, skills and attitudes to carry out activities or tasks under specified conditions.

Competency-based training and assessment. Training and assessment that are characterized by a performance orientation, emphasis on standards of performance and their measurement, and the development of training to the specified performance standards.

Competency standard. A level of performance that is defined as acceptable when assessing whether or not competency has been achieved.

Critical Incident Stress. means the manifestation of unusual and/or extreme emotional, physical and/or behavioural reactions in an individual following an unexpected event, an accident, an incident or serious incident

Emergency Situation. means a serious and dangerous situation requiring immediate actions; (11) ‘

Error. An action or inaction by an operational person that leads to deviations from organizational or the operational person’s intentions or expectations.

Error management. The process of detecting errors and responding to them with countermeasures that reduce or eliminate the consequences of errors and mitigate the probability of further errors or undesired states.

Examination. means a formalised test evaluating the person's knowledge and understanding;

Flight plan. Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

General Air Traffic means all movements of civil aircraft, as well as all movements of State aircraft (including military, customs and police aircraft) when these movements are carried out in conformity with the procedures of the ICAO

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

ICAO competency framework. A competency framework, developed by ICAO, is a selected group of competencies for a given aviation discipline. Each competency has an associated description and observable behaviours.

Language Proficiency Endorsement means the statement entered on and forming part of a licence, indicating the language proficiency of the holder

Licence means a document issued and endorsed in accordance with this Regulation and entitling its lawful holder to exercise the privileges of the ratings and endorsements contained therein;

Observable behaviour (OB). A single role-related behaviour that can be observed and may or may not be measurable.

On-The-Job Training Instruction means the phase of unit training during which previously acquired job-related routines and skills are integrated in practice under the supervision of a qualified on-the-job training instructor in a live traffic situation;

On-The-Job Training Instructor (OJTI) Endorsement means the authorisation entered on and forming part of a licence, indicating the competence of the holder to give on-the-job training instruction and instruction on synthetic training devices.

Part-Task Trainer (PTT) means a synthetic training device to provide training for specific and selected operational tasks without requiring the learner to practice all of the tasks which are normally associated with a fully operational environment;

Performance Objective. means a clear and unambiguous statement of the performance expected of the person undertaking the training, the conditions under which the performance takes place and the standards that the person undertaking training should meet;

Performance criteria. Statements used to assess whether the required levels of performance have been achieved for a competency. A performance criterion consists of an observable behaviour, condition(s) and a competency standard.

Provisional Inability means a temporary state in which the licence holder is prevented from exercising the privileges of the licence when ratings, endorsements and his/her medical certificate are valid;

Problematic use of substances. The use of one or more psychoactive substances by aviation personnel in a way that: a) constitutes a direct hazard to the user or endangers the lives, health or welfare of others; and/or b) causes or worsens an occupational, social, mental or physical problem or disorder.

Psychoactive substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Quality system. Documented organizational procedures and policies; internal audit of those policies and procedures; management review and recommendation for quality improvement.

Rated air traffic controller. An air traffic controller holding a licence and valid ratings appropriate to the privileges to be exercised.

Rating. An authorization entered on or associated with a licence and forming part thereof, stating special conditions, privileges or limitations pertaining to such licence.

Rating Endorsement. means the authorisation entered on and forming part of a licence, indicating the specific conditions, privileges or limitations pertaining to the relevant rating;

Renewal. means the administrative act taken after a rating, endorsement or certificate has expired that renew the privileges of the rating, endorsement or certificate for a further specified period subject to the fulfilment of specified requirements;

Revalidation. means the administrative act taken within the period of validity of a rating, endorsement or certificate that allows the holder to continue to exercise the privileges of a rating, endorsement or

certificate for a further specified period subject to the fulfilment of specified requirements;

Sector. means a part of a control area and/or part of a flight information region or upper region;

Simulator. means a synthetic training device that presents the important features of the real operational environment and reproduces the operational conditions under which the person undertaking training can practice real-time tasks directly;

Synthetic Training Device means any type of device by which operational conditions are simulated, including simulators and part-task trainers;

Synthetic Training Device Instructor (STDI) Endorsement means the authorisation entered on and forming part of a licence, indicating the competence of the holder to give instruction on synthetic training devices;

State safety programme (SSP). An integrated set of regulations and activities aimed at improving safety.

Threat. Events or errors that occur beyond the influence of an operational person, increase operational complexity and must be managed to maintain the margin of safety.

Threat management. The process of detecting threats and responding to them with countermeasures that reduce or eliminate the consequences of threats and mitigate the probability of errors or undesired states.

Training (ATC). The entire process of theoretical courses, practical exercises, including simulation, and on-the-job training required in order to acquire and maintain the skills to deliver safe, orderly and air traffic control services. It consists of:

- (a) Initial training, providing basic and rating training, leading to the grant of a student licence,
- (b) Unit training, including transitional training prior to on-the-job training and on-the-job training, leading to the grant of an air traffic controller licence,
- (c) Continuation training, keeping the endorsements of the licence valid,
- (d) Training of on-the-job training instructors, leading to the grant of the instructor endorsement,
- (e) Training of licence holders entitled to act as competence examiners and/or competence assessors;

Unit Competence Scheme. means an approved scheme indicating the method by which the unit maintains the competence of its licence holders;

Validation. means a process by which, through the successful completion of a unit endorsement course associated to a rating or a rating endorsement, the holder may start exercising the privileges of that rating or rating endorsement.

Unit Training Plan. means an approved plan detailing the processes and timing required to allow the unit procedures to be applied to the local area under the supervision of an on-the-job-training instructor.

CAR.ATCO.009 Safety and Regulatory Audits and Inspections

- (1) The Authority shall conduct scheduled audits at intervals not exceeding one (1) year at the Delegate's office and/or unit or facility. The Authority may conduct Random inspection as and when it deems appropriate.
- (2) The Authority may require the Delegate to provide such documentation and information as the Authority considers relevant to the audit or inspection.
- (3) Subject to the Delegate's security and safety requirements, the Authority shall be granted by the Delegate, unrestricted access to the Delegate's facilities and shall be permitted to carry its own equipment (e.g. computers, cameras and recording devices) under all conditions while carrying out its oversight functions.

CAR.ATCO.0011 Resolution of Compliance and Safety Issues

- (1) When objective evidence is found showing regulatory non-compliance by the Delegate, the finding shall be classified as follows:
 - (a) a level one finding is any significant non-compliance which reduces the level of compliance and/or safety.
 - (b) a level two finding is any non-compliance that does not result in an immediate risk to safety.
 - (c) a level three finding is any item where it has been identified, by objective evidence, to contain potential problems that could lead to a non-compliance. These are considered as observations only and will not impact a certificate.
- (2) After the Delegate receives notification of a finding:
 - (a) a level one finding must be rectified immediately or within the timescale specified by the Authority.
 - (b) a level two finding shall be addressed in a corrective action plan with a resolution period specified by the Authority and shall be appropriate to the nature of the finding, but in any circumstance shall not be more than ninety (90) days. In certain circumstances, the Authority may extend the ninety (90) day period subject to justification that is acceptable to the Authority.
 - (c) the Delegate's corrective action plan shall:
 - i. be submitted by the date specified by the Authority;
 - ii. identify the root cause of the non-compliance;
 - iii. indicate the person, position, department or entity responsible for the corrective action;
 - iv. indicate the corrective action required including any multiple steps; and
 - v. be acceptable to the Authority.
- (3) Upon the completion and/or implementation of a corrective action, the Delegate shall notify the Authority and provide evidence of its resolution.

CAR.ATCO.013 Enforcement Actions

- (1) When a CAA Inspector is apprised of, or observes a deficiency or contravention, they will complete a Detection Notice form and forward it without delay to the appropriate Supervisor for decision as specified in CAR 12.
- (2) The Authority may pursue one or more enforcement actions upon recognizing or identifying a contravention. This following is a list of enforcement actions in degree of severity which the Authority may pursue in the event of a contravention:
 - (a) **Verbal warning.** The Director of Legal Department or a designated inspector acting on his behalf may verbally caution an individual or a designated person within an entity regarding a contravention. Such verbal warnings must accurately state the contravention, provide a legal basis for the contravention, and inform the cautioned party regarding which further enforcement actions are available to the Authority in the event of further non-compliance.
 - (b) **Formal written warning.** The Director of Legal Department or a designated inspector acting on his behalf may issue a written notice to an individual or a designated person within an entity stating that the Authority believes that a contravention has occurred. Such written warnings must accurately state the contravention, provide a legal basis for the contravention, and inform the cautioned party regarding which further enforcement actions are available to the Authority in the event of further non-compliance.
 - (c) **Monetary fine.** Any fine shall be levied via the serving of an Aviation Infringement Notice (AIN) up to the maximum amount stated in the enforcement provision in each regulation in accordance with CAR-12.115. Non-payment of fines may be pursued through the appropriate court, with the cost of court action to be borne by the party receiving the AIN.

PART II: ATCO - REQUIREMENTS FOR THE LICENSING OF AIR TRAFFIC CONTROLLERS

SUBPART A – GENERAL**CAR.ATCO.A.001 Scope**

This Part establishes the requirements for the issue, revocation and suspension of student air traffic controller licences and air traffic controller licences, their associated ratings and endorsements, and the conditions of their validity and use. When the term licence is used alone in this part, it shall mean the Air Traffic controller licence and Student Air Traffic controller licence.

CAR.ATCO.A.003 Applicability

- (a) This Part applies to all Oman Air Traffic Controller Licence holders and Student Air Traffic Controller Licence holders providing Air Traffic Services under approved Air Navigation Service Providers (ANSPs).
- (b) This Chapter also applies to holders of a foreign ATC licence holders employed by an Oman ANSP and seeking to convert their foreign licences.

CAR.ATCO.A.005 Application for the issue of licences, ratings and endorsements

- (a) An application for the issue of licences, ratings and endorsements shall be submitted to The AUTHORITY in accordance with the established procedures.
- (b) An application for the issue of further ratings or endorsements, for the revalidation or renewal of endorsements and for the reissue of the licence shall be submitted to the Civil Aviation Authority.
- (c) The licence shall remain the property of the person to whom it is issued, unless it is revoked by the AUTHORITY, the licence holder shall sign the licence before exercising the privileges of the licence.
- (d) The licence shall specify all relevant information related to the privileges that are granted by the licence and shall comply with the requirements of this CAR.

AMC1.CAR.ATCO. A.005 Application for the issue of licences, ratings and endorsements

The applications for the issue of a student air traffic controller licence, an air traffic controller licence, ratings and endorsements should be made using the respective application forms for the corresponding request.

CAR.ATCO.A.010 Foreign licence conversion

- (a) A foreign ATC Licence and associated ratings, issued by an ICAO Contracting State may be converted to an OMAN CAA issued Air Traffic Controllers licence subject to meeting the requirements in this part.
- (b) The application for the conversion of a foreign ATC licence shall be made by an OMAN ANSP/ ATC unit after ensuring the following requirements:
 - 1) The foreign ATC licence has been issued by an ICAO Contracting State;
 - 2) The foreign licence is not suspended nor revoked;
 - 3) The foreign licence has been endorsed with the ATC rating that will be applied for by the OMAN ANSP/ ATC unit;
 - 4) The foreign ATC licence holder holds a medical corresponding to the foreign ATC licence;
 - 5) The foreign licence is endorsed with a valid ELP level 4 or higher;
 - 6) The application for licence conversion is accompanied by a "Licence verification letter" issued by the foreign aviation authority that issued the foreign licence.

AMC1 CAR.ATCO.A.010 Foreign licence conversion

Applicants should add details of all the ratings held on the foreign licence for subsequent addition of ratings in the future.

AMC2 CAR.ATCO.A.010 Foreign licence conversion

Subsequent addition of ratings may be approved if the foreign licence holder has had the rating endorsed on his/her foreign licence requirements approved for the ATC unit.

AMC3 CAR.ATCO.A.010 Foreign licence conversion

The first step towards the conversion of a foreign licence should be the issuance of a student air traffic controller licence. Subsequently, the air traffic controller licence may be issued by the CAA upon completion of other requirements as stated in this part.

GM1 CAR.ATCO.A.010 (b) Foreign Licence Conversion

The CAA expects that the ATS unit conducts exhaustive evaluations of any foreign ATCOs prior to applying for the licence conversion such as relevant rating validations and their respective validity, experiences, enforcement records, medical records and medical limitations.

CAR.ATCO.A.015 Exercise of the privileges of licences and provisional inability

- (a) The exercise of the privileges granted by a licence shall be dependent on the validity of the licence, ratings, endorsements including ELP and the medical certificate.
- (b) Licence holders shall not exercise the privileges of their licence when having doubts of being able to safely exercise the privileges of the licence and shall in such cases immediately notify the relevant air navigation service provider of the provisional inability to exercise the privileges of their licence.
- (c) Air navigation service providers may declare the provisional inability of the licence holder if they become aware of any doubt concerning the ability of the licence holder to safely exercise the privileges of the licence.
- (d) Air navigation service providers shall develop and implement objective, transparent and non-discriminatory procedures to enable licence holders declaring provisional inability to exercise the privileges of their licence in accordance with point (b), to declare the provisional inability of the licence holder in accordance with point (c), to manage the operational impact of provisional inability cases and to inform the AUTHORITY as defined in that procedure.
- (e) The procedures referred to in point (d) shall be included in the unit competence scheme

GM1 CAR.ATCO.A.015(b) Exercise of the privileges of licences and provisional inability

- Grounds for Provisional Inability:
Examples of grounds for doubting the ability to safely exercise the privileges of the licence may be that the licence holder is:
 - (a) under the influence of psychoactive substances;
 - (b) unfit to perform the duties due to injury, fatigue, sickness, stress, including critical incident stress or other similar causes;
 - (c) not meeting all the competence-related requirements set out in the unit competence scheme.

GM1 CAR.ATCO.A.015(d) Exercise of the privileges of licences and provisional inability

- Procedures:
The procedures developed and implemented to enable licence holders declaring provisional inability to exercise the privileges of their licence, to manage the operational impact of provisional inability cases and to inform the AUTHORITY should include but are not limited to:
 - (a) the processes to declare and terminate provisional inability;
 - (b) an indicative list of cases when the AUTHORITY must be informed of the declaration or termination of the provisional inability;
 - (c) the processes to inform the AUTHORITY; and
 - (d) the mitigating measures to be implemented to ensure sufficient capacity and the continuity of the service.

CAR.ATCO.A.020 Revocation and suspension of licences, ratings and Endorsements

- (a) Licences, ratings and endorsements may be suspended or revoked by the AUTHORITY according to this regulation and associated to CAR 12 enforcement procedures when the licence holder does not comply with the requirements of this Part.
- (b) When the licence holder has his/her licence revoked, the ANSP shall administer the revocation process and notify the CAA to ensure the licence holder does not exercise the privileges anymore.
- (c) With the issue of the air traffic controller licence the student air traffic controller licence stands revoked.
- (d) The AUTHORITY shall establish administrative procedures for the suspension and revocation of licences, ratings and endorsements.
- (e) The AUTHORITY may suspend the licence in the case of provisional inability not being terminated.
- (f) The AUTHORITY shall suspend or revoke a licence, rating or endorsement in particular in the following circumstances:
 - (1) exercising the privileges of the licence when the licence holder no longer complies with the applicable requirements of this Regulation;
 - (2) obtaining a student air traffic controller or an air traffic controller licence, rating, endorsement or certificate by falsification of submitted documentary evidence;
 - (3) falsification of the licence or certificate records;
 - (4) exercising the privileges of the licence, rating(s) or endorsement(s) under the influence of psychoactive substances.
- (g) In cases of suspension or revocation of licences, ratings and endorsements, the AUTHORITY shall inform the licence holder in writing of this decision and of their right of appeal.
- (h) The suspension or revocation of the assessor endorsement should be notified to the relevant air navigation service provider as well.
- (i) The AUTHORITY shall also suspend or revoke a licence, rating or endorsement upon written request of the licence holder.

GM1 CAR.ATCO. A020 Revocation and suspension of licences, ratings and endorsements

- Examinations and Assessments

Examinations and assessments conducted by an assessor, during suspension or after the revocation of his/her assessor endorsement or by an OJTI during suspension or after revocation of his/her OJTI endorsement respectively, should be invalid.

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SUBPART B – LICENCES, RATINGS AND ENDORSEMENTS

CAR ATCO.B.001 Student Air Traffic Controller Licence

- (a) Holders of a student air traffic controller licence shall be authorized to provide air traffic control services in accordance with the rating(s) contained in their licence under the supervision of an on- the-job training instructor; towards the issue of first or subsequent rating and to undertake training for rating endorsement(s).
- (b) Applicants for the issue of a student air traffic controller licence shall:
 - (1) be at least 18 years old;
 - (2) have successfully completed initial training at a training organization approved by CAA in accordance with the requirements laid down in Part ATCO.OR relevant to the rating, and if applicable, to the rating endorsement, as set out in Part ATCO, Subpart D, Section 2;
 - (3) hold a valid medical certificate;
 - (4) have demonstrated an adequate level of English proficiency in accordance with the requirements set out in ATCO.B.020.
- (c) The student air traffic controller licence shall contain the language endorsement(s) and at least one rating and, if applicable, one rating endorsement;
- (d) The holder of a student air traffic controller licence who has not started exercising the privileges of that licence within one year from the date of its issue or has interrupted exercising those privileges for a period of more than one year may only start or continue unit training in that rating after an assessment of his/her previous competence conducted by a training organization certified in accordance with the requirements laid down in Part ATCO.OR and certified to provide initial training relevant to the rating, as to whether he/she continues to satisfy the requirements relevant to that rating, and after satisfying any additional training requirements resulting from this assessment.

GM1 CAR.ATCO.B.001 Student air traffic controller licence

- (a) APC (Assessment of previous competence) is only applicable for:
 - 1) Military ATCOs not holding an ICAO Contracting State ATC license, or who cannot provide evidence of civilian experience. Military ATCO should also provide evidence of initial training based on ICAO standards. The objective of the APC for a military ATCO is to determine the training needs in relation to Civil Aviation Regulations and ICAO Standards and Recommended Practices. This training needs analysis should be approved by the Authority prior to commencement of OJT;
 - 2) The holder of a Student ATC licence who has not exercised the privileges of that licence for a period of 1 year. The Student ATCO may only commence or continue unit training in that rating after the APC in order to determine whether he continues to satisfy the requirements relevant to that rating, and after satisfying any training needs that result from this assessment.
 - 3) An ATC licence holder who has not exercised the privileges of a particular rating for more than 12 months but less than 4 years. The ATC licence holder may only commence unit training in that rating after the APC in order to determine whether the person concerned continues to satisfy the conditions of that rating, and after satisfying any training needs that result from this assessment.
 - 4) For an OMAN licence holder transferring to another unit when an ATC rating is required to be utilized at a different unit.
 - 5) The APC is not applicable for an applicant who completed initial course and did not start the corresponding OJT.
- (b) If the privileges of a particular rating have not been exercised for 4 years or more. The ATC licence holder is required to complete an initial training refresher course applicable to the rating and approved by the Authority.

GM1 CAR.ATCO.B.001(a) Student air traffic controller licence

- Maturity of Air Traffic Controllers

Persons who wish to undertake air traffic controller training at a training organisation satisfying the requirements laid down in Part ATCO.OR should be educationally, physically and mentally sufficiently mature. In order to assess their ability to complete air traffic controller training, training organisations may conduct aptitude assessments and/or set out educational or similar requirements which could serve as a prerequisite for commencing air traffic controller training.

AMC1 CAR.ATCO.B.001(d) Student air traffic controller licence

- Assessment of Previous Competence:

- a) When establishing previous competence in a rating, the assessment should be based on the requirements set out in Part ATCO, Subpart D, Section 2.
- b) The training organization should conclude the APC with a report indicating the training needs.

CAR.ATCO.B.005 Air Traffic Controller Licence

- (a) Holders of an air traffic controller licence shall be authorized to provide air traffic control services in accordance with the ratings and endorsements of their licence, and to exercise the privileges of the endorsements contained therein.
- (b) The privileges of an air traffic controller licence shall include the privileges of a student air traffic controller licence as set out in ATCO.B.001 (a).
- (c) Applicants for the first issue of an air traffic controller licence shall:
 - 1) Be not less than 21 years of age;
 - 2) hold a student air traffic controller licence issued by CAA Oman;
 - 3) have completed a unit required training course and successfully passed the appropriate examinations and assessments in accordance with the requirements set out in Subpart D, Section 3;
 - 4) hold a valid Class III medical certificate issued by CAA Oman; and
 - 5) have demonstrated an adequate level of English language proficiency in accordance with the requirements set out in ATCO.B.020.
- (d) The air traffic controller licence shall be validated by the inclusion of one or more ratings for which the training was successful.
- (e) The holder of an air traffic controller licence who has not started exercising the privileges of any rating within one year from the date of its issue may only start unit training in that rating after an assessment of his/her previous competence, conducted by an ATO/ANSP satisfying the competency requirements and certified to provide initial training relevant to the rating, as to whether he/she continues to satisfy the requirements relevant to that rating, and after satisfying any training requirements resulting from this assessment.
- (f) An air traffic controller licence issued under this part shall remain valid for a maximum of five years subject to maintenance of at least one ATC rating, English language proficiency and a Class III medical certificate.

AMC1 CAR.ATCO.B.005 Air traffic controller licence

Any person holding an Air traffic controller licence issued by the CAA applying for revalidating an expired rating or for an additional ATC rating should be issued with Student Air Traffic Controller Licence in order to complete the experience requirements for the rating.

AMC2 CAR.ATCO.B.005 Air traffic controller licence

Maintenance of Air Traffic controller licence

(a) An ATC licence may be renewed subject to:

- i. holding a valid Class III medical
- ii. holding at least one valid ATC rating
- iii. holding ELP level 4 or above
- iv. completing the refresher and/or continuation training and/or as per the requirements of the ATS unit training plan

(b) The ATC rating/s should be maintained as required in ATCO.B.010.

(c) The application for the renewal of ATC licence shall be made as per the method prescribed by the CAA.

CAR ATCO.B.010 Air Traffic Controller Ratings

(a) Licences shall contain one or more of the following ratings in order to indicate the type of service which the licence holder is privileged and authorised to provide:

- 1) Aerodrome control (ADC) rating, indicating that the licence holder is competent to provide and/or supervise the provision of an air traffic control service to aerodrome traffic at an aerodrome;
- 2) the Approach Control Procedural (APP) rating, indicating that the licence holder is competent to provide and/or supervise the provision of an air traffic control service to arriving, departing or transiting aircraft without the use of surveillance equipment;
- 3) the Approach Control Surveillance (APS) rating, indicating that the licence holder is competent to provide and/or supervise the provision of an air traffic control service to arriving, departing or transiting aircraft with the use of surveillance equipment;
- 4) the Area Control Procedural (ACP) rating, indicating that the licence holder is competent to provide and/or supervise the provision of an area control service to aircraft without the use of surveillance equipment;
- 5) the Area Control Surveillance (ACS) rating, indicating that the licence holder is competent to provide and/or supervise the provision of an area control service to aircraft with the use of surveillance equipment.

(b) The holder of a rating who has interrupted exercising the privileges associated with that rating for a period of four or more immediately preceding consecutive years may only start unit training in that rating after assessment of previous competence, conducted by a ATO/ANSP satisfying the competency requirements and certified to provide training relevant to the rating, as to whether the person concerned continues to satisfy the conditions of that rating, and after satisfying any training requirements resulting from this assessment.

(c) Before exercising the privileges indicated in (a), the licence holder shall be familiar with all pertinent and current information.

AMC1 CAR.ATCO.B.010(b) Air Traffic Controller Ratings

- Assessment of Previous Competence

When establishing previous competence in a rating, the assessment should be based on the requirements set out in Part ATCO, Subpart D, Section 2.

AMC2 CAR ATCO.B.010 Air traffic controller ratings

Concurrent issuance of two air traffic controller ratings:

When two air traffic controller ratings are sought concurrently, the Licensing Authority shall determine the applicable requirements on the basis of the requirements for each rating. These requirements shall not be less than those of the more demanding rating.

AMC3 CAR.ATCO.B.010 Air Traffic Controller Ratings

- Maintenance of air traffic controller ratings
 - (a) A rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period determined by the Licensing Authority. That period shall not exceed six months. A rating shall remain invalid until the controller's ability to exercise the privileges of the rating has been re-established.
 - (b) The validity period of an ATC rating for initial issue and renewal shall start not later than 30 days from the date on which the assessment has been successfully completed.
 - (c) An ATC rating shall be revalidated if:
 - (1) the applicant has been exercising the privileges of the licence for a minimum number of hours as defined in the unit competence scheme;
 - (2) the applicant has undertaken refresher training within the validity period of the ATC rating according to the unit competence scheme;
 - (3) the applicant's competence has been assessed in accordance with the unit competence scheme not earlier than three months prior to the expiry date of the ATC rating.
 - (d) ATC ratings shall be revalidated, provided that the requirements set out in point (c) are met, within the 3-month period immediately preceding their expiry date. In such cases the validity period shall be counted from that expiry date.
 - (e) If the ATC rating is revalidated before the period provided for in point (d), its validity period shall start not later than 30 days from the date on which the assessment has been successfully completed, provided that the requirements in point (c)(1) and (2) are also met.
 - (f) If the validity of a unit endorsement expires, the licence holder shall successfully complete the unit endorsement course in accordance with the requirements set out in Part ATCO, Subpart D, Section 3 in order to renew the endorsement.

AMC4 CAR.ATCO.B.010 Air traffic controller ratings

- Validity of The ATC Rating:

An ATC rating shall be valid for 12 months.

 - (a) When establishing the validity of an ATC rating, the specificities of the unit and seasonal variations should be taken into account.
 - (b) Appropriate means should be in place to monitor the competence of the air traffic controllers. The means should be proportionate to the validity time.
 - (c) If the proposed validity time of the ATC rating exceeds 12 months, additional means should be in place to monitor and ensure the continuous competence of the air traffic controllers. If the ATC unit is proposing to increase the validity time of the unit endorsement, a safety assessment should be conducted. The safety assessment may cover several units. Any such increase shall depend upon approval from the concerned CAA departments.
 - (d) A rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period determined by the Licensing Authority. That period shall not exceed six months. A rating shall remain invalid until the controller's ability to exercise the privileges of the rating has been re-established.

AMC5 CAR.ATCO.B.010 Air traffic controller ratings

- Practical Skills Assessment for Revalidation of each ATC Rating
 - (a) If the assessment of practical skills is taking the form of a dedicated assessment consisting of a single assessment or a series of assessments, the last assessment declaring the licence holder competent should take place within the three-month period immediately preceding the ATC rating expiry date.
 - (b) If the assessment of practical skills is taking the form of a continuous assessment by which the air traffic controller's competence is assessed along a defined period of time, the formal conclusion on declaring the licence holder competent should take place within the three-month period immediately preceding the ATC rating expiry date.

GM1 ATCO.B.010 Air traffic controller ratings

- Commencement of ATC Rating Validity in Case of Early Revalidation
 - For the purpose of establishing the validity period of the ATC rating in case of early revalidation, the date of the assessment should be the date of the:
 - (a) last assessment declaring the licence holder competent in case of a dedicated assessment; and
 - (b) formal conclusion of declaring the licence holder competent in case of continuous assessment.

CAR.ATCO.B.020 English Language Proficiency Endorsement

- (a) Air traffic controllers and student air traffic controllers shall not exercise the privileges of their licences unless they have a valid English language proficiency endorsement. The English language proficiency endorsement shall indicate the language, the level of proficiency and the expiry date.
- (b) The English language proficiency level shall be determined in accordance with the rating scale set out in Appendix 1 of Part ATCO.
- (c) The applicant for English language proficiency endorsement shall demonstrate, in accordance with the rating scale referred to in point (b), at least an operational level (i.e. level four) of language proficiency.

To do so, the applicant shall:

- 1) communicate effectively in voice only (telephone/radiotelephone) and in face-to-face situations;
 - 2) communicate on common, concrete and work-related topics with accuracy and clarity;
 - 3) use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings in a general or work-related context;
 - 4) handle successfully and with relative ease the linguistic challenges presented by a complication or unexpected turn of events that occur within the context of a routine work situation or communicative task with which they are otherwise familiar; and
 - 5) use a dialect or accent which is intelligible to the aeronautical community.
- (d) Notwithstanding point (c), extended level (level five) of the English language proficiency rating scale set out in Appendix 1 of Annex I may be required by the air navigation service provider, where the operational circumstances of the particular rating or endorsement warrant a higher level of English language proficiency for imperative reasons of safety. Such a requirement shall be non-discriminatory, proportionate, transparent, and objectively justified by the air navigation service provider wishing to apply the higher level of proficiency and shall be approved by The AUTHORITY.
 - (e) English Language proficiency shall be demonstrated by a certificate attesting the result of the assessment.

AMC1 CAR.ATCO.B.020 English Language proficiency endorsement

- a) For Licensing and endorsement purposes, the CAA only accepts ELP certificates issued by CAA approved ELP language assessment bodies.
- b) In case of foreign licence conversions, the ELP from a foreign licence will be accepted at level 4 for endorsement on a CAA issued ATCO licence.

CAR.ATCO.B.030 Validity of English language proficiency endorsement

- a) The validity of the English language proficiency endorsement, depending on the level determined in accordance with Appendix 1 of Part ATCO, shall be:
 - 1) for operational level (level four), three years from the date of assessment; or
 - 2) for extended level (level five), six years from the date of assessment;
 - 3) for expert level (level six); unlimited.
- b) The validity period of the English language proficiency endorsements for initial issue and renewal shall start from the date on which the language proficiency assessment has been successfully completed.
- c) When the validity of an English language proficiency endorsement expires, the licence holder shall successfully complete an English language proficiency assessment in order to have his/her endorsement renewed.

GM CAR.ATCO.B.030 (c) Validity of English language proficiency endorsement

An assessment of ELP does not substitute the expiry date or ELP level endorsed on the licence.

CAR.ATCO.B.040 Assessment of English language proficiency

- a) The demonstration of language proficiency shall be done through a method of assessment approved by the AUTHORITY, which shall contain:
 - 1) the process by which an assessment is done;
 - 2) the qualification of the assessors;
 - 3) the appeals procedure.
- b) English Language assessment bodies shall comply with the requirements established by The AUTHORITY.

AMC1 CAR.ATCO.B.040 Assessment of English language proficiency

- General
 - a) The English language proficiency assessment should be designed to reflect the tasks undertaken by air traffic controllers, but with specific focus on language rather than operational procedures and knowledge.
 - b) The assessment should determine the applicant's ability to communicate effectively using visual and non-visual communication in both routine and non-routine situations.

AMC2 CAR.ATCO.B.040 Assessment of English language proficiency

- Assessment

The assessment should comprise the following three elements:

- (1) listening — assessment of comprehension;
 - (2) speaking — assessment of pronunciation, fluency, structure and vocabulary;
 - (3) interaction.
- (b) The switch between phraseology and plain language should be assessed for listening and speaking proficiency.
 - (c) When the assessment is not conducted in a face-to-face situation, it should use appropriate technologies for the assessment of the applicant's abilities in listening and speaking, and for enabling interactions.
 - (d) In case of revalidation of the language proficiency endorsement, the assessment may be conducted during training activities or on operational position, with prior notification to the air traffic controller to be assessed.

- (e) Irrespective of the way the assessment is organised, the requirements listed in (a) and (b) as well as the relevant provisions for language proficiency assessors should be met.

AMC3 CAR.ATCO.B.040 Assessment of English language proficiency

- Language Proficiency Assessors
 - (a) Persons responsible for language proficiency assessment should be suitably trained and qualified.
 - (b) Language proficiency assessors should undergo regular refresher training on language assessment skills.
 - (c) Language proficiency assessors should not conduct language proficiency assessments whenever their objectivity may be affected.

AMC4 CAR.ATCO.B.040 Assessment of English language proficiency

- Criteria for The Acceptability of Language Assessment Bodies
 - (a) A language assessment body should provide clear information about its organisation and its relationships with other organisations.
 - (b) If a language assessment body is also an air traffic controller training organisation, there should be a clear and documented separation between the two activities.
 - (c) The language assessment body should employ a sufficient number of qualified interlocutors and language proficiency assessors to administer the required tests.
 - (d) The assessment documentation should include at least the following:
 - (1) assessment objectives;
 - (2) assessment layout, timescale, technologies used, assessment samples, voice samples;
 - (3) assessment criteria and standards
 - (4) documentation demonstrating the assessment validity, relevance and reliability for the operational and extended levels;
 - (5) documentation demonstrating the assessment validity, relevance and reliability for the expert level;
 - (6) procedures to ensure that language assessments are standardised within the language assessment body and in the ATC community;
 - (7) assessment procedures and responsibilities, such as:
 - preparation of individual assessment;
 - administration: location(s), identity check and invigilation, assessment discipline, confidentiality/security;
 - reporting and documentation provided to the AUTHORITY and/or to the applicant, including sample certificate; and
 - retention of documents and records.
 - (8) The assessment documentation and records should be kept for a period of at least 5 years and should be made available to the AUTHORITY upon request.

GM1 CAR.ATCO.B.040 Assessment of English language proficiency

- Language Proficiency Assessors
 - a) Persons responsible for English language proficiency assessment should be either aviation specialists (e.g. current or former air traffic controllers) or language specialists with additional aviation-related training. The preferred approach for an assessment would be to form a team consisting of an operational expert and a language expert.
 - b) English Language proficiency assessors should be trained in the requirements specific to the language proficiency assessment, and assessment and interlocution techniques.

GM2 CAR.ATCO.B.040 Assessment of English language proficiency

- Language Proficiency Assessors

Further information can be found in the 'Manual on the Implementation of ICAO Language Proficiency Requirements' (ICAO Doc 9835) and the Language Testing Criteria for Global Harmonization (ICAO Cir 318 AN/180).

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SUBPART C - REQUIREMENTS FOR INSTRUCTORS AND ASSESSORS**SECTION 1 - Instructors****CAR.ATCO.C.001 Theoretical instructors**

- a) Theoretical training shall only be carried out by appropriately qualified instructors.
- b) A theoretical instructor is appropriately qualified if he/she:
 - 1) holds or have held an air traffic controller licence and/or holds a professional qualification appropriate to the subject being taught and/or has demonstrated adequate knowledge and experience to the training organization;
 - 2) has demonstrated instructional skills to the training organization.

GM1 CAR.ATCO.C.001(b)(1) Theoretical instructors

- Qualification of Theoretical Instructors
Professional qualification appropriate to the subject should ensure sufficient level of current knowledge, which is relevant to the subject and its application in air traffic control.

AMC1 CAR.ATCO.C.001(b)(2) Theoretical instructors

- Instructional Skills for Theoretical Instructors:
A satisfactory demonstration of instructional skills for theoretical instructors should establish competence at least in the following areas:
 - a) lesson objectives are defined and communicated;
 - b) subject questions are fully answered;
 - c) visual aids are used appropriately;
 - d) language is unambiguous;
 - e) the lesson is correctly summarized; and
 - f) lesson objectives are fulfilled

CAR ATCO.C.005 Practical instructors

A person shall only carry out practical training in an operational environment when he/she holds an air traffic controller licence with an on-the-job training instructor (OJTI) endorsement.

CAR ATCO.C.010 On-the-job training instructor (OJTI) privileges

- a) Holders of an OJTI endorsement are authorised to provide practical training and supervision on operational working positions for which a valid unit endorsement is held and on synthetic training devices in the ratings held.
- b) Holders of an OJTI endorsement shall only exercise the privileges of the endorsement if they have:
 - 1) exercised for at least two years the privilege of the rating they will instruct in;
 - 2) exercised for an immediately preceding period of at least six months the privilege of the valid rating, in which instruction will be given;
 - 3) practised instructional skills in those procedures in which it is intended to provide instruction.
- c) The period of two years referred to in point (b) (1) can be shortened to not less than one year by the AUTHORITY when requested by the ANSP or the training organisation.

GM1 CAR.ATCO.C.010 On the job instructor (OJTI) privileges

The unit must assess the impact of any procedure change against the required instructional skills.

GM2 CAR.ATCO.C.010 On the job instructor (OJTI) privileges

- Shortening of The Rating Experience Requirement For OJTI
When assessing the training organisations' or ANSP's request for the shortening of the rating experience requirement for OJTIs, the AUTHORITY should take into account the complexity of the traffic in the unit where the on-the-job instruction is provided, as well as the impact on the continuity and safety aspects of the service.

CAR.ATCO.C.015 Application for on-the-job training instructor endorsement

Applicants for the issue of an OJTI endorsement shall:

- a) hold an air traffic controller licence with a valid rating;
- b) have exercised the privileges of an air traffic controller licence for a period of at least two years immediately preceding the application. This period can be shortened to not less than one year by The AUTHORITY when requested by the ANSP; and
- c) within the year immediately preceding the application, have successfully completed a practical instructional techniques course during which the required knowledge and pedagogical skills are taught and have been appropriately assessed.

CAR.ATCO.C.020 Validity of on-the-job training instructor endorsement

- a. The OJTI endorsement shall be valid for a period of three years.
- b. The OJTI endorsement may be revalidated by successfully completing refresher training on practical instructional skills during its validity period, provided that the requirements of ATCO.C.015(a) and (b) are met.
- c. If the OJTI endorsement has expired, it may be renewed by:
 - 1) receiving refresher training on practical instructional skills; and
 - 2) successfully passing a practical instructor competence assessment;
 - 3) within the year preceding the application for renewal, provided that the requirements of ATCO.C.015(a) and (b) are met.
- d. In the case of first issue and renewal the period of validity of the OJTI endorsement shall start not later than 30 days from the date on which the assessment has been successfully completed.

GM1 CAR.ATCO.C.020(b) Validity of on-the-job training instructor endorsement

- Revalidation
 - a) Successful completion of the refresher training in practical instructional skills may be verified by several means, for example by:
 - 1) dedicated or continuous assessment;
 - 2) peer assessment; or
 - 3) demonstration of the practical instructional skills.
 - b) The verification should be undertaken following the completion of the refresher training

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SECTION 2 - Assessors**CAR.ATCO.C.045 Assessor privileges**

- a) A person shall only carry out assessments when he/she holds an assessor endorsement.
- b) Holders of an assessor endorsement are authorized to carry out assessments at the ATS units:
 - 1) during initial training for the issue of a student air traffic controller licence or for the issue of a new rating and/or rating endorsement, if applicable;
 - 2) of previous competence for the purpose of ATCO.B.001(d) and ATCO.B.010(b);
 - 3) of student air traffic controllers for the issue of a rating and rating endorsements, if applicable;
 - 4) of air traffic controllers for the issue of a rating and rating endorsements, if applicable, as well as for revalidation and renewal of a rating and rating endorsement;
 - 5) of applicant practical instructors or applicant assessors when compliance with the requirements of point (d)(2) to (3) is ensured.
- c) Holders of an assessor endorsement shall only exercise the privileges of the endorsement if they have:
 - 1) at least three years' experience in the rating and rating endorsement(s) they will assess in; and
 - 2) demonstrated knowledge of current operational practices.
- d) In addition to the requirements set out in point (c), holders of an assessor endorsement shall only exercise the privileges of the endorsement:
 - 1) for assessments leading to the issue, revalidation and renewal of a rating and if they also hold the unit rating associated with the assessment for an immediately preceding period of at least one year;
 - 2) for assessing the competence of an applicant for the issue or renewal of an OJTI endorsement, if they hold an OJTI endorsement and have exercised the privileges of that endorsement for at least three years;
 - 3) for assessing the competence of an applicant for the issue or renewal of an assessor endorsement, if they have exercised the privileges of the assessor endorsement for at least three years.
- e) When assessing for the purpose of issue and renewal of a rating and rating endorsement, and for ensuring supervision on the operational working position, the assessor shall also hold an OJTI endorsement, or an OJTI associated with the assessment shall be present.

AMC1 CAR.ATCO.C.045(c)(2) Assessor privileges

- Demonstration of Knowledge of Current Operational Practices
The demonstration of knowledge of current operational practices may be achieved by establishing familiarity with current environment and operational procedures.

CAR.ATCO.C.050 Vested interests

Assessors shall not conduct assessments whenever their objectivity may be affected.

CAR.ATCO.C.055 Application for assessor endorsement

Applicants for the issue of an assessor endorsement shall:

- a) have exercised the privileges of an air traffic controller licence for the specific rating for at least three years
- b) within the year preceding the application have successfully completed a CAA approved assessor course during which the required knowledge and skills are taught using theoretical and practical methods; and
- c) have successfully completed an assessor competence assessment including an assessment of previous competency checks

CAR.ATCO.C.060 Validity of assessor endorsement

- a) The assessor endorsement shall be valid for a period of three years.
- b) The assessor endorsement may be revalidated by successfully completing refresher training on assessment skills and on current operational practices during its validity period and has been appropriately assessed
- c) If the assessor endorsement has expired, it may be renewed by:
 - 1) receiving refresher training on assessment skills and on current operational practices; and
 - 2) successfully passing an assessor competence assessment;
- d) within the year preceding the application for renewal and meeting ATCO.C.060 (b)
- e) In the case of first issue and renewal the period of validity of the assessor endorsement shall start not later than 30 days from the date on which the process has been successfully completed.

GM1 CAR.ATCO.C.060(b) Validity of assessor endorsement

- Revalidation
 - a) Successful completion of the refresher training in assessment skills and current operational practices may be verified by several means, for example by:
 - 1) dedicated or continuous assessment;
 - 2) peer assessment; or
 - 3) demonstration of the practical assessment skills.
 - b) Current operational practices may be refreshed by transitional and pre-on-the-job training.
 - c) The verification should be undertaken following the completion of the refresher training.

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SUBPART D - AIR TRAFFIC CONTROLLER TRAINING**SECTION 1 - General requirements****CAR.ATCO.D.001 Objectives of air traffic controller training**

- a) Air traffic controller training shall cover the entirety of theoretical courses, practical exercises, including simulation, and on-the-job training required in order to acquire and maintain the skills to deliver safe, orderly and expeditious air traffic control services.
- b) For the issuance an air traffic controller licence, the approved training for air traffic controllers shall be conducted within an approved training organization certified by the CAA in accordance with the organization requirements.

CAR.ATCO.D.005 Types of air traffic controller training

- a) Air traffic controller training shall consist of the following types:
 - 1. initial training, leading to the issue of a student air traffic controller licence or to the issue of an additional rating and, if applicable, rating endorsement, providing:
 - i. 'basic training': theoretical and practical training designed to impart fundamental knowledge and practical skills related to basic operational procedures;
 - ii. 'rating training': theoretical and practical training designed to impart knowledge and practical skills related to a specific rating and, if applicable, to rating endorsement;

SECTION 2 - Initial training requirements

CAR.ATCO.D.010 Composition of initial training

- a) Initial training, intended for an applicant for a student air traffic controller licence or for the issue of an additional rating and/or, if applicable, rating endorsement, shall consist of:
 - 1) Basic training, comprising all the subjects, topics and subtopics contained in Appendix 2
 - 2) Rating training: comprising all the subjects, topics and subtopics contained in Appendices 3, 4, 5, 6, 7 and 8, as applicable to the rating.
- b) Training intended for an additional rating shall consist of the subjects, topics and subtopics applicable to at least one of the ratings established in point (a)(2).
- c) Training intended for the reactivation of a rating following a not successful assessment of previous competence according to ATCO.B.010(b) shall be tailored according to the result of that assessment.
- d) Training intended for a rating endorsement other than ATCO.B.015(a)(3) shall consist of subjects, topics and subtopics developed by the training organisation and approved as part of the training course.
- e) Basic and/or rating training may be complemented with subjects, topics and subtopics that are additional or specific to the local and national environment.
- f) The training syllabi and objectives for basic and rating training should be based on the ICAO Annex 1 standards.

Note: ICAO Doc.10056 may be used for training syllabi reference, subject to the Authority acceptance.

AMC1 CAR.ATCO.D.010(a) Composition of initial training

*General: Refer to the **Appendix 2**.*

AMC1 CAR.ATCO.D.010(a)(1) Composition of initial training

*BASIC TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES refer to the **Appendix 2**.*

AMC1 CAR.ATCO.D.010(a)(2)(i) Composition of initial training

*AERODROME CONTROL RATING (ADC) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES: refer to the **Appendix 3**.*

AMC1 CAR.ATCO.D.010(a)(2)(iii) Composition of initial training

*APPROACH CONTROL PROCEDURAL RATING (APP) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES: Refer to the **Appendix 5**.*

AMC1 CAR.ATCO.D.010(a)(2)(iv) Composition of initial training

*AREA CONTROL PROCEDURAL RATING (ACP) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES: Refer to the **Appendix 6**.*

AMC1 CAR.ATCO.D.010(a)(2)(v) Composition of initial training

*APPROACH CONTROL SURVEILLANCE RATING (APS) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES: Refer to the **Appendix 7**.*

AMC1 CAR.ATCO.D.010(a)(2)(vi) Composition of initial training

*AREA CONTROL SURVEILLANCE RATING (ACS) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES: Refer to the **Appendix 8**.*

GM1 CAR.ATCO.D.010 Composition of initial training

- General
 - a) Initial training consists of basic training which is common to all applicants and rating training of which there are six different rating syllabi.
 - b) If an applicant already holds a student air traffic controller licence or an air traffic controller licence, and there is a requirement for training to achieve an additional rating (and, if relevant, rating endorsement), the applicant should not repeat the basic training objectives; however, there is a requirement to achieve the objectives contained within the relevant rating training plus any additional objectives specific to the local or national environment.

CAR.ATCO.D.015 Initial training plan

An initial training plan shall be established by the training organisation and approved by the AUTHORITY. It shall contain at least:

- a) the composition of the initial training course provided according to ATCO.D.010;
- b) the structure of the initial training provided according to ATCO.D.020(b);
- c) the process for the conduct of the initial training course(s);
- d) the training methods;
- e) minimum and maximum duration of the initial training course(s);
- f) with regard to ATCO.D.010(b), process for adapting the initial training course(s) to take due account of a successfully completed basic training course;
- g) processes for examinations and assessments according to ATCO.D.025 and ATCO.D.035, as well as performance objectives according to ATCO.D.030 and ATCO.D.040;
- h) training personnel qualifications, roles and responsibilities;
- i) process for early termination of training;
- j) the appeal process;
- k) identification of records to be kept specific to initial training;
- l) process and reasons for reviewing and amending the initial training plan and its submission to the AUTHORITY. The review of the initial training plan shall take place at least once every three years.

CAR.ATCO.D.020 Basic and rating training courses

- a) Basic and rating training shall be provided as separate or integrated courses.
- b) Basic and rating training courses or an integrated initial training course shall be developed and provided by training organisations and approved by the AUTHORITY.
- c) When initial training is provided as an integrated course, a clear distinction shall be made between the examinations and assessments for:
 - 1) basic training; and
 - 2) each rating training.
- d) The successful completion of initial training, or of rating training for the issue of an additional rating, shall be demonstrated by a certificate of completion issued by the training organisation.
- e) The successful completion of basic training shall be demonstrated by a certificate of completion issued by the training organisation.

GM1 CAR.ATCO.D.020(d) Basic and rating training courses

- Certificate of Completion of Initial Training
The certificate of completion may take any form and title and may cover multiple candidates.

CAR.ATCO.D.025 Basic training examinations and assessment

- a) Basic training courses shall include theoretical examination(s) and assessment(s).
- b) A pass in theoretical examination(s) shall be awarded to an applicant achieving a minimum of 75 % of the marks allocated to that examination.
- c) Assessment(s) of performance objectives as listed in ATCO.D.030 shall be conducted on a part-task trainer or a simulator.
- d) A pass in assessment(s) shall be awarded to an applicant who consistently demonstrates the required performance as listed in ATCO.D.030 and shows the behaviour required for safe operations within the air traffic control service.

CAR.ATCO.D.030 Basic training performance objectives

Assessment(s) shall include evaluation of the following performance objectives:

- a) checking and using the working position equipment;
- b) developing and maintaining situational awareness by monitoring traffic and identifying aircraft when applicable;
- c) monitoring and updating flight data display(s);
- d) maintaining a continuous listening watch on the appropriate frequency;
- e) issuing appropriate clearances, instructions and information to traffic;
- f) using approved phraseology;
- g) communicating effectively;
- h) applying separation;
- i) applying coordination as necessary;
- j) applying the prescribed procedures for the simulated airspace;
- k) detecting potential conflicts between aircraft;
- l) appreciating priority of actions;
- m) choosing appropriate separation methods.

CAR.ATCO.D.035 Rating training examinations and assessment

- a) Rating training courses shall include theoretical examination(s) and assessment(s).
- b) A pass in theoretical examination(s) shall be awarded to an applicant achieving a minimum of 75 % of the marks allocated to that examination.
- c) Assessment(s) shall be based on the rating training performance objectives described in ATCO.D.040.
- d) Assessment(s) shall be conducted on a simulator.
- e) A pass in assessment(s) shall be awarded to an applicant who consistently demonstrates the required performance described in ATCO.D.040 and shows the behaviour required for safe operations within the air traffic control service.

CAR.ATCO.D.040 Rating training performance objectives

- a) Rating training performance objectives and performance objective tasks shall be defined for each rating training course.
- b) Rating training performance objectives shall require an applicant to:
 - 1) demonstrate the ability to manage air traffic in a manner that ensures safe, orderly and expeditious services; and
 - 2) handle complex and dense traffic situations.
- c) In addition to point (b), rating training performance objectives for the Aerodrome Control Visual (ADV) rating shall ensure that applicants:
 - 1) manage the workload and provide air traffic services within a defined aerodrome area of responsibility; and
 - 2) apply aerodrome control techniques and operational procedures to aerodrome traffic.

- d) In addition to point (b), rating training performance objectives for the Approach Control Procedural rating shall ensure that applicants:
- 1) manage the workload and provide air traffic services within a defined approach control area of responsibility; and
 - 2) apply procedural approach control, planning techniques and operational procedures to arriving, holding, departing and transiting traffic.
- e) In addition to point (b), rating training performance objectives for the Approach Control Surveillance rating shall ensure that applicants:
- 1) manage the workload and provide air traffic services within a defined approach control area of responsibility; and
 - 2) apply approach surveillance control, planning techniques and operational procedures to arriving, holding, departing and transiting traffic.
- f) In addition to point (b), rating training performance objectives for the Area Control Procedural rating shall ensure that applicants:
- 1) manage the workload and provide air traffic services within a defined area control area of responsibility; and
 - 2) apply procedural area control, planning techniques and operational procedures to area traffic.
- g) In addition to point (b), rating training performance objectives for the Area Control Surveillance rating shall ensure that applicants:
- 1) manage the workload and provide air traffic services within a defined area control area of responsibility; and
 - 2) apply area surveillance control, planning techniques and operational procedures to area traffic.

AMC1 CAR.ATCO.D.040 Rating training performance objectives

- General

Training organisations should define the detailed performance objectives for each rating training course, as well as the training scenario.

GM1 CAR.ATCO.D.040 Rating training performance objectives

GENERAL

A list of performance objectives tasks can be found in EUROCONTROL's document 'ATCO Rating Training Performance Objectives', and ICAO DOC.10056.

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SECTION 3 - Training of instructors and assessors

CAR.ATCO.D.090 Training of practical instructors

- a) Training of practical instructors shall be developed and provided by training organisations and shall consist of:
 - 1) a practical instructional techniques course for OJTI, including an assessment;
 - 2) a refresher training course on practical instructional skills;
 - 3) a method(s) for assessing the competence of practical instructors.
- b) The training courses and assessment methods referred to in point (a) shall be approved by the AUTHORITY.

AMC1 CAR.ATCO.D.090(a)(1) Training of practical instructors

- SYNTHETIC TRAINING DEVICES USED FOR OJTI TRAINING

For the training of on-the-job training instructors, a part-task trainer or a simulator should be used. If the synthetic training environment does not correspond to the rating of the intended instructional environment, the applicant should practise the instructional skills in those procedures in which it is intended to provide instruction for at least one day before being assessed.

AMC2 CAR.ATCO.D.090(a)(1) Training of practical instructors

- Assessment of Instructional Techniques for Practical Instructors

A successful assessment of instructional techniques for practical instructors should establish competence at least in the following areas:

- (a) regulatory impact on air traffic controller training;
- (b) human factors impact on air traffic controller training;
- (c) determination of the background and experience of the person undertaking training;
- (d) determination of the current level of ability of the person undertaking training;
- (e) conduct of a pre-session briefing;
- (f) planning and conduct of the training session;
- (g) demonstration and explanation of the tasks;
- (h) monitoring of the training session;
- (i) management of interventions correctly, including error correction;
- (j) evaluation of the performance of the person undertaking training;
- (k) debrief of the person undertaking training;
- (l) furnishing of written reports on the performance of the person undertaking training;
- (m) taking appropriate follow-up action towards resolving training problems;
- (n) techniques of pausing clocks; and
- (o) knowledge of technical facilities/environment.

AMC1 CAR.ATCO.D.090(a)(2) Training of practical instructors

- Refresher Training in Practical Instructional Skills

Refresher training in practical instructional skills should prevent knowledge and skills erosion, and, for the training of STDIs, it should be designed to maintain awareness of the current operational practices.

AMC1 CAR.ATCO.D.090(a)(3) Training of practical instructors

- Practical Instructor Competence Assessment

The practical instructor competence assessment for an OJTI may be undertaken either in live operations or on a synthetic training device. The practical instructor competence assessment for a practical instructor should be undertaken on a synthetic training device.

GM1 CAR.ATCO.D.090 Training of practical instructors

- Practical Instructional Techniques Course for OJTI'S

Further information regarding the practical instructional techniques course for OJTIs can be found in *PANS TRG ICAO Document 9868*.

CAR.ATCO.D.095 Training of assessors

- (a) Training of assessors shall be developed and provided by training organisations and shall consist of:
- 1) an assessor training course, including an assessment;
 - 2) a refresher training course on assessment skills;
 - 3) a method(s) for assessing the competence of assessors.
- (b) The training courses and the assessment method referred to in point (a) shall be approved by the AUTHORITY.

AMC1 CAR.ATCO.D.095(a)(1) Training of assessors

- Assessor Training Course

A successful assessment for the purpose of the assessor training course should establish competence at least in the following areas of assessment knowledge and techniques:

- (a) regulatory environment and legal obligations;
- (b) types of assessment and their application;
- (c) performance objectives constituting air traffic controller competence;
- (d) conditions of assessments to create reliable results;
- (e) processing of assessments and administrative procedures;
- (f) giving verbal feedback and writing assessment reports;
- (g) vested interests and code of conduct;
- (h) accurately assessing competence against the performance objectives;
- (i) developing a good questioning technique and designing questions appropriate to the assessment.

AMC2 CAR.ATCO.D.095(a)(1) Training of assessors

- Assessment of Assessor Competence

The assessment of assessor competence should focus on the application of the skills of an assessor. The skills should represent at least a subset of the competences taught during the assessor training course.

AMC1 CAR.ATCO.D.095(a)(2) Training of assessors

- Refresher Training in Assessment Skills

Refresher training in assessment skills should prevent knowledge and skills erosion and it should be designed to maintain skills in assessment techniques and awareness of the regulatory environment.

GM1CAR. ATCO.D.095(a)(3) Training of assessors

- Assessment of Assessor Competence

The level of harmonisation on competence assessment is low as a result of the variety of methods. Any assessment of assessor competence should be realistic and it could take place during live traffic situations or during training.

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APPENDIX PART II

APPENDIX 1 PART II - LANGUAGE PROFICIENCY RATING SCALE — REQUIREMENTS FOR PROFICIENCY IN LANGUAGES

Language proficiency rating scale: expert, extended and operational levels

Level	<i>Pronunciation</i> <i>Uses a dialect and/or accent intelligible to the aeronautical community</i>	<i>Structure</i> <i>Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task</i>	<i>Vocabulary</i>	<i>Fluency</i>	<i>Comprehension</i>	<i>Interactions</i>
Expert 6	Pronunciation, stress, rhythm and intonation, though possibly influenced by the first language or regional variation, almost never interfere with ease of understanding.	Both basic and complex grammatical structures and sentence patterns are consistently well controlled.	Vocabulary range and accuracy are sufficient to communicate effectively on a wide variety of familiar and unfamiliar topics. Vocabulary is idiomatic, nuanced, and sensitive to register.	Able to speak at length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to emphasise a point. Uses appropriate discourse markers and connectors spontaneously	Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties.	Interacts with ease in nearly all situations. Is sensitive to verbal and non-verbal cues, and responds to them appropriately.
Extended 5	Pronunciation, stress, rhythm and intonation, though influenced by the first language or regional variation,	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete,	Able to speak at length with relative ease on familiar topics, but may not vary speech flow as a stylistic device.	Comprehension is accurate on common, concrete, and work-related topics and mostly accurate when the	Responses are immediate, appropriate, and informative. Manages the speaker/listener

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Level	Pronunciation <i>Uses a dialect and/or accent intelligible to the aeronautical community</i>	Structure <i>Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task</i>	Vocabulary	Fluency	Comprehension	Interactions
	rarely interfere with ease of understanding.	are attempted but with errors which sometimes interfere with meaning.	and work-related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	Can make use of appropriate discourse markers or connectors.	speaker is confronted with a linguistic or situational complication or an unexpected turn of events. Is able to comprehend a range of speech varieties (dialect and/or accent) or registers.	relationship effectively.
Operational 4	Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding.	Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.	Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work-related topics. Can often paraphrase successfully when lacking vocabulary in unusual or unexpected	Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective	Comprehension is mostly accurate on common, concrete, and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. When the speaker is confronted with a	Responses are usually immediate, appropriate, and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings

Air Traffic Controller Licensing and ATC Training Organizations

<i>Level</i>	<i>Pronunciation</i> <i>Uses a dialect and/or accent intelligible to the aeronautical community</i>	<i>Structure</i> <i>Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task</i>	<i>Vocabulary</i>	<i>Fluency</i>	<i>Comprehension</i>	<i>Interactions</i>
			circumstances.	communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.	linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	by checking, confirming, or clarifying.

APPENDIX 2 to PART II - BASIC TRAINING

(Reference: Part ATCO Subpart D, Section 2, ATCO.D.010(a)(1))

- a) Basic training shall cover the following knowledge requirements:
- (i) Air law
 - (ii) rules and regulations relevant to the air traffic controller;
 - (iii) Air traffic control equipment
 - (iv) principles, use and limitations of equipment used in air traffic control;
 - (v) General knowledge:
 - until 2 November 2022, principles of flight; principles of operation and functioning of aircraft, engines and systems; aircraft performance relevant to air traffic control operations;
 - as of 3 November 2022, principles of flight; principles of operation and functioning of aircraft and RPAS, engines and
 - (vi) systems; aircraft performance relevant to air traffic control operations;
 - (vii) Human performance including principles of TEM and the impact of psychoactive substances on human performance;

Note. — Guidance material to design training programs on human performance, including TEM, can be found in the Human Factors Training Manual (Doc 9683).

- (viii) Meteorology: aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;
- (ix) Navigation
 - principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids; and
- (x) Operational procedures
 - air traffic control, communication, radiotelephony and phraseology procedures (routine, non-routine and emergency); use of the relevant aeronautical documentation; safety practices associated with flight.

- b) The basic training comprises of the following subjects, topics and sub topics:

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SUBJECT 2: AVIATION LAW

SUBJECT 3: AIR TRAFFIC MANAGEMENT

SUBJECT 4: METEOROLOGY

SUBJECT 5: NAVIGATION

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SUBJECT 7: HUMAN FACTORS

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➤ **SUBJECT 1: INTRODUCTION TO THE COURSE**

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Subtopic ACFTB 7.2 — Climb factors

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Subtopic ACFTB 7.4 — Descent and initial approach factors

Subtopic ACFTB 7.5 — Final approach and landing factors

Subtopic ACFTB 7.6 — Economic factors

Subtopic ACFTB 7.7 — Environmental factors

➤ **SUBJECT 7: HUMAN FACTORS**

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Subtopic HUMB 3.2 — Definition of human error

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Subtopic HUMB 4.2 — Communication process

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TOPIC HUMB 5 — THE WORK ENVIRONMENT

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➤ SUBJECT 8: EQUIPMENT AND SYSTEMS**TOPIC EQPSB 1 — ATC EQUIPMENT**

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Subtopic EQPSB 2.2 — Direction finding

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Subtopic EQPSB 3.3 — Data link communications

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TOPIC EQPSB 5 — RADAR

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Subtopic EQPSB 11.3 — Approach control

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TOPIC PENB 2 — AIRSPACE USERS

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Subtopic PENB 2.3 — Expectations and requirements of pilots

TOPIC PENB 3 — CUSTOMER RELATIONS

Subtopic PENB 3.1 — Customer relations

TOPIC PENB 4 — ENVIRONMENTAL PROTECTION

Subtopic PENB 4.1 — Environnemental protection

APPENDIX 3 to PART II A – AERODROME CONTROL RATING

(Reference: PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(i))

- a) Aerodrome Control Rating — ADC shall cover the following knowledge requirements:
 - 1) aerodrome layout; physical characteristics and visual aids;
 - 2) airspace structure;
 - 3) applicable rules, procedures and source of information;
 - 4) air navigation facilities;
 - 5) air traffic control equipment and its use;
 - 6) terrain and prominent landmarks;
 - 7) characteristics of air traffic;
 - 8) weather phenomena; and
 - 9) emergency and search and rescue plans;

- b) The aerodrome control rating training shall comprise of the following subjects, topics and sub topics:

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Subtopic INTR 2.3 — Assessment process

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Subtopic LAW 1.1 — Privileges and conditions

TOPIC LAW 2 — RULES AND REGULATIONS

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TOPIC LAW 3 — ATC SAFETY MANAGEMENT

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Subtopic LAW 3.2 — Safety Investigation

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Subtopic ATM 1.1 — Aerodrome control service

Subtopic ATM 1.2 — Flight information service (FIS)

Subtopic ATM 1.3 — Alerting service (ALRS)

Subtopic ATM 1.4 — ATS system capacity and air traffic flow management

TOPIC ATM 2 — COMMUNICATION

Subtopic ATM 2.1 — Effective communication

TOPIC ATM 3 — ATC CLEARANCES AND ATC INSTRUCTIONS

Subtopic ATM 3.1 — ATC clearances

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TOPIC ATM 4 — COORDINATION

Subtopic ATM 4.1 — Necessity for coordination

Subtopic ATM 4.2 — Tools and methods for coordination

Subtopic ATM 4.3 — Coordination procedures

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Subtopic ATM 8.1 — Data management

TOPIC ATM 9 — OPERATIONAL ENVIRONMENT (SIMULATED)

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Subtopic ATM 9.3 — Handover-takeover

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Subtopic MET 1.1 — Meteorological phenomena

TOPIC MET 2 — SOURCES OF METEOROLOGICAL DATA

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TOPIC NAV 2 — INSTRUMENT NAVIGATION

Subtopic NAV 2.1 — Navigational systems

Subtopic NAV 2.2 — Stabilised approach

➤ SUBJECT 6: AIRCRAFT**TOPIC ACFT 1 — AIRCRAFT INSTRUMENTS**

Subtopic ACFT 1.1 — Aircraft instruments

TOPIC ACFT 2 — AIRCRAFT CATEGORIES

Subtopic ACFT 2.1 — Wake turbulence

TOPIC ACFT 3 — FACTORS AFFECTING AIRCRAFT PERFORMANCE

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Subtopic ACFT 3.4 — Economic factors

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TOPIC ACFT 4 — AIRCRAFT DATA

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➤ **SUBJECT 7: HUMAN FACTORS**

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TOPIC HUM 3 — SOCIAL AND ORGANISATIONAL FACTORS

Subtopic HUM 3.1 — Team resource management (TRM)

Subtopic HUM 3.2 — Teamwork and team roles

Subtopic HUM 3.3 — Responsible behaviour

TOPIC HUM 4 — STRESS

Subtopic HUM 4.1 — Stress

Subtopic HUM 4.2 — Stress management

TOPIC HUM 5 — HUMAN ERROR

Subtopic HUM 5.1 — Human error

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TOPIC HUM 6 — COLLABORATIVE WORK

Subtopic HUM 6.1 — Communication

Subtopic HUM 6.2 — Collaborative work within the same area of responsibility

Subtopic HUM 6.3 — Collaborative work between different areas of responsibility

Subtopic HUM 6.4 — Controller/pilot cooperation

➤ **SUBJECT 8: EQUIPMENT AND SYSTEMS**

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Subtopic EQPS 1.1 — Radio communications

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TOPIC EQPS 2 — AUTOMATION IN ATS

Subtopic EQPS 2.1 — Aeronautical fixed telecommunication network (AFTN)

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Subtopic EQPS 5.3 — Navigational equipment degradation

➤ **SUBJECT 9: PROFESSIONAL ENVIRONMENT**

TOPIC PEN 1 — FAMILIARISATION

Subtopic PEN 1.1 — Study visit to aerodrome

TOPIC PEN 2 — AIRSPACE USERS

Subtopic PEN 2.1 — Contributors to civil ATS operations

Subtopic PEN 2.2 — Contributors to military ATS operations

TOPIC PEN 3 — CUSTOMER RELATIONS

Subtopic PEN 3.1 — Provision of services and user requirements

TOPIC PEN 4 — ENVIRONMENTAL PROTECTION

Subtopic PEN 4.1 — Environmental protection

➤ SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS**TOPIC ABES 1 — ABNORMAL AND EMERGENCY SITUATIONS (ABES)**

Subtopic ABES 1.1 — Overview of ABES

TOPIC ABES 2 — SKILLS IMPROVEMENT

Subtopic ABES 2.1 — Communication effectiveness

Subtopic ABES 2.2 — Avoidance of mental overload

Subtopic ABES 2.3 — Air/ground cooperation

TOPIC ABES 3 — PROCEDURES FOR ABNORMAL AND EMERGENCY SITUATIONS

Subtopic ABES 3.1 — Application of procedures for ABES

Subtopic ABES 3.2 — Radio failure

Subtopic ABES 3.3 — Unlawful interference and aircraft bomb threat

Subtopic ABES 3.4 — Strayed or unidentified aircraft

Subtopic ABES 3.5 — Runway incursion

➤ SUBJECT 11: AERODROMES**TOPIC AGA 1 — AERODROME DATA, LAYOUT AND COORDINATION**

Subtopic AGA 1.1 — Definitions

Subtopic AGA 1.2 — Coordination

TOPIC AGA 2 — MOVEMENT AREA

Subtopic AGA 2.1 — Movement area

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TOPIC AGA 3 — OBSTACLES

Subtopic AGA 3.1 — Obstacle-free airspace around aerodromes

TOPIC AGA 4 — MISCELLANEOUS EQUIPMENT

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APPENDIX 4 to PART II
(reserved)

APPENDIX 5 to PART II – APPROACH CONTROL PROCEDURAL RATING (APP)

(Reference: Annex I – PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(iii))

- a) Approach Control Procedural Rating — APP shall cover the following knowledge requirements:
 - 1) airspace structure;
 - 2) applicable rules, procedures and source of information;
 - 3) air navigation facilities;
 - 4) air traffic control equipment and its use;
 - 5) terrain and prominent landmarks;
 - 6) characteristics of air traffic and traffic flow;
 - 7) weather phenomena; and
 - 8) emergency and search and rescue plans
- b) The approach control procedural rating training shall comprise of the following subjects, topics and subtopics:

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Subtopic INTR 2.3 — Assessment process

SUBJECT 2: AVIATION LAW**TOPIC LAW 1 — ATCO LICENSING/CERTIFICATE OF COMPETENCE**

Subtopic LAW 1.1 — Privileges and conditions

TOPIC LAW 2 — RULES AND REGULATIONS

Subtopic LAW 2.1 — Reports

Subtopic LAW 2.2 — Airspace

TOPIC LAW 3 — ATC SAFETY MANAGEMENT

Subtopic LAW 3.1 — Feedback process

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Subtopic ATM 1.1 — Air traffic control (ATC) service

Subtopic ATM 1.2 — Flight information service (FIS)

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Subtopic AGA 3.1 — Obstacle-free airspace around aerodromes

TOPIC AGA 4 — MISCELLANEOUS EQUIPMENT

Subtopic AGA 4.1 — Location

APPENDIX 6 to PART II - AREA CONTROL PROCEDURAL RATING (ACP)

(Reference: PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(iv))

- a) Area Control Procedural Rating — ACP shall cover the following knowledge requirements:
 - 1) airspace structure;
 - 2) applicable rules, procedures and source of information;
 - 3) air navigation facilities;
 - 4) air traffic control equipment and its use;
 - 5) terrain and prominent landmarks;
 - 6) characteristics of air traffic and traffic flow;
 - 7) weather phenomena; and
 - 8) emergency and search and rescue plans

- b) The area control procedural rating training shall comprise of the following subjects, topics and subtopics;

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Subtopic EQPS 1.2 — Other voice communications

TOPIC EQPS 2 — AUTOMATION IN ATS

Subtopic EQPS 2.1 — Aeronautical fixed telecommunication network (AFTN)

Subtopic EQPS 2.2 — Automatic data interchange

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TOPIC PEN 2 — AIRSPACE USERS

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Subtopic ABES 2.1 — Communication effectiveness

Subtopic ABES 2.2 — Avoidance of mental overload

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TOPIC ABES 3 — PROCEDURES FOR ABNORMAL AND EMERGENCY SITUATIONS

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Subtopic ABES 3.2 — Radio failure

Subtopic ABES 3.3 — Unlawful interference and aircraft bomb threat

Subtopic ABES 3.4 — Strayed or unidentified aircraft

Subtopic ABES 3.5 — Diversions

APPENDIX 7 to PART II – APPROACH CONTROL SURVEILLANCE RATING (APS)

(Reference: PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(v))

- 1) Approach Control Surveillance Rating — APS shall cover the following knowledge requirements:
 - (b) The applicant shall meet the requirements specified for approach control procedural rating training in so far as they affect the area of responsibility, and shall have demonstrated a level of knowledge appropriate to the privileges granted, in at least the following additional subjects:
 - 1) principles, use and limitations of applicable ATS surveillance systems and associated equipment; and
 - 2) procedures for the provision of ATS surveillance service, as appropriate, including procedures to ensure
 - (c) appropriate terrain clearance.
- 2) The approach control surveillance rating training shall comprise of the following subjects, topics and subtopics;

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Subtopic PEN 2.1 — Contributors to civil ATS operations

Subtopic PEN 2.2 — Contributors to military ATS operations

TOPIC PEN 3 — CUSTOMER RELATIONS

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TOPIC PEN 4 — ENVIRONMENTAL PROTECTION

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APPENDIX 8 to PART II AREA CONTROL SURVEILLANCE RATING (ACS)

(Reference: — PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(vi))

- 1) Area Control Surveillance Rating — ACS shall cover the following knowledge requirements:
 - (a) The applicant shall meet the requirements specified for area control procedural rating training in so far as they affect the area of responsibility, and shall have demonstrated a level of knowledge appropriate to the privileges granted, in at least the following additional subjects:
 - 1) principles, use and limitations of applicable ATS surveillance systems and associated equipment; and
 - 2) procedures for the provision of ATS surveillance service, as appropriate, including procedures to ensure
 - (b) appropriate terrain clearance.

- 2) The area control surveillance rating training shall comprise of the following subjects, topics and subtopics:

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SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS**TOPIC ABES 1 — ABNORMAL AND EMERGENCY SITUATIONS (ABES)**

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TOPIC ABES 2 — SKILLS IMPROVEMENT

Subtopic ABES 2.1 — Communication effectiveness

Subtopic ABES 2.2 — Avoidance of mental overload

Subtopic ABES 2.3 — Air/ground cooperation

TOPIC ABES 3 — PROCEDURES FOR ABNORMAL AND EMERGENCY SITUATIONS

Subtopic ABES 3.1 — Application of procedures for ABES

Subtopic ABES 3.2 — Radio failure

Subtopic ABES 3.3 — Unlawful interference and aircraft bomb threat

Subtopic ABES 3.4 — Strayed or unidentified aircraft

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Subtopic ABES 3.6 — Transponder Failure

Appendix 9 to PART II – EXPERIENCE REQUIREMENTS – AIR TRAFFIC CONTROLLER LICENCE

EXPERIENCE REQUIREMENTS – AIR TRAFFIC CONTROLLER LICENCE

- (a) The applicant shall have completed an approved training course and demonstrated the required competence, having accomplished not less than three months of satisfactory service engaged in the actual control of air traffic under the supervision of an air traffic control (ATC) on-the-job training instructor (OJTI). The experience requirements specified for air traffic controller ratings in Appendix 10 of Part ATCO may be credited as part of the experience specified in this paragraph.

- (b) An air traffic controller acting as an air traffic control on-the-job training instructor shall hold an appropriate rating and be qualified as an air traffic control on-the-job training instructor.

Appendix 10 to PART II – EXPERIENCE REQUIREMENTS – AIR TRAFFIC CONTROLLER RATINGS

The applicant shall have:

- 1) Satisfactorily completed approved course;
- 2) Demonstrated the required competence while providing, under the supervision of an air traffic control (ATC) on-the-job training instructor (OJTI), one or more of the following:
 - a) Aerodrome control rating: an aerodrome control service, for a period of not less than 90 hours or one month, whichever is greater, at the unit for which the rating is sought;
 - b) approach control procedural, approach control surveillance, area control procedural or area control surveillance rating: the control service for which the rating is sought, for a period of not less than 180 hours or three months, whichever is greater, at the unit for which the rating is sought; if the privileges of the approach control surveillance rating include surveillance radar approach duties, the experience shall include not less than 25 plan position indicator approaches on the surveillance equipment of the type in use at the unit for which the rating is sought and under the supervision of an air traffic control (ATC) on-the-job training instructor (OJTI).
- 3) The application for a rating shall be made within six months from the completion of experience specified in (2).
- 4) When the applicant already holds an air traffic controller rating in another category, or the same rating for another unit, the Licensing Authority shall determine whether the experience requirement of (2) can be reduced, and if so, to what extent.

Appendix 11 to PART II – SKILL REQUIREMENTS – AIR TRAFFIC CONTROLLER RATINGS

The applicant shall have demonstrated, at a level appropriate to the privileges being granted, the skill, judgement and performance required to provide a safe, orderly and expeditious control service, including the recognition and management of threats and errors.

PART III: ATCO.OR - REQUIREMENTS FOR AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

SUBPART A – GENERAL REQUIREMENTS

CAR.ATCO.OR.A.001 Scope

This Part, set out in ATCO.OR, establishes the requirements applicable to air traffic controller training organisations in order to obtain and maintain a certificate in accordance with this Regulation.

GM1 CAR. ATCO.OR.A.001 Scope

The scope of Part ATCO OR is restricted to approval of approved training organizations providing approved training as applicable and when approved by the CAA for the issue of an Air Traffic Controller licence, associated ratings and endorsements; as mentioned in Subpart D, ATCO.D.005 Types of air traffic controller training.

The trainings, assessments and proficiency requirements conducted at the ATS units are not included in the scope of this part.

SUBPART B– REQUIREMENTS FOR AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

CAR.ATCO.OR.B.001 Application for a training organization certificate

- a) Applications for a training organisation certificate shall be submitted to the AUTHORITY in due time to allow the AUTHORITY to evaluate the application. The application shall be submitted in accordance with the procedure established by the authority.
- b) Applicants for an initial certificate shall demonstrate to the AUTHORITY how they will comply with the requirements established in this Regulation.
- c) An application for a training organisation certificate shall include the following information:
 - 1) the applicant's name and address;
 - 2) Trade Licence from applicable Local Authority
 - 3) the address(es) of the place(s) of operation if different from the applicant's address in point (a);
 - 4) the names and contact details of:
 - (i) the accountable manager;
 - (ii) the head of the training, if different from point (i);
 - (iii) the Compliance Monitoring Manager
 - (iv) the chief training instructor
 - (v) the person(s) nominated by the training organisation as the focal point(s) for communication with the AUTHORITY;
 - 5) date of intended start of activity or change;
 - 6) a list of types of training to be provided and at least one training course from each type of training that is intended to be provided;
 - 7) the declaration of compliance with the applicable requirements shall be signed by the accountable manager, stating the training organisation's compliance with the requirements at all times;
 - 8) the management system processes; and
 - 9) the date of application

GM1 ATCO.OR.B.001(c)(2) Application for a training organisation certificate

The requirement to add the list of ATC units is not relevant in the case of training organisations which provide initial training only.

AMC1 CAR.ATCO.OR.B.001(c)(2) Application for a training organisation certificate

- Applicants for the issue of a certificate as an Approved Air traffic control training organisation should provide the CAA with:
 - a. The following information:
 - (i) Name and address of the training organisation;
 - (ii) (ii) Date of intended commencement of activity;
 - (iii) (iii) Security clearance issued by the CAA Security Department of the Sultanate of OMAN
 - (iv) (iv) Personal details and qualifications of nominated personnel
 - (v) (v) Name and address(s) of the facility (s) and/or operating site(s) at which the training is to be conducted;
 - (vi) (vi) List of courses.
 - (vii) (vii) List of simulation training devices that the training organisation intends to use, if applicable;
 - (viii) (viii) The type of training that the training organisation wishes to provide and the corresponding training programme;
 - (ix) (ix) Any other documentation or information required as outlined by the CAA, and
 - b. The Training and Procedures manual (TPM) including the training courses, programme and lesson plans.

CAR.ATCO.OR.B.005 Means of compliance

- a) Alternative means of compliance to the AMC adopted by the AUTHORITY may be used by an organisation to establish compliance with this Regulation.
- b) When an organisation wishes to use an alternative means of compliance, it shall, prior to implementing it, provide the AUTHORITY with a full description of the alternative means of compliance. The description shall include any revisions to manuals or procedures that may be relevant.

AMC1 CAR.ATCO.OR.B.005 Means of compliance

- Demonstration of Compliance

In order to demonstrate that the Rules are complied with, a safety (risk) assessment should be completed and documented. The result of this safety (risk) assessment should demonstrate that an equivalent level of safety to that established by the Acceptable Means of Compliance (AMC) adopted by the AUTHORITY is reached.

CAR.ATCO.OR.B.010 Terms of approval and privileges of a training organisation certificate

- a) Training organisations shall comply with the scope and privileges defined in the terms of approval attached to the organisation's certificate.
- b) The privilege to provide unit and continuation training shall remain with ATS units / ANSP (Air Navigation Service Provider) organisations which:
 - (1) hold a certificate for the provision of the air traffic control service; or
 - (2) have concluded a specific agreement with the ATC service provider.

AMC1 CAR.ATCO.OR.B.010(a) Terms of approval and privileges of a training organisation certificate

The management system documentation should contain the privileges and detailed scope of activities including the contracted ones for which the training organisation is certified, as relevant to this Regulation.

CAR.ATCO.OR.B.015 Changes to the training organisation

- (a) Changes to the organisation that affect the certificate or the terms of approval of the training organisation or any relevant element of the training organisation's management systems shall require prior approval by the AUTHORITY.
- (b) Training organisations shall agree with the AUTHORITY on the changes that require prior approval in addition to those specified in point (a).
- (c) For any changes requiring prior approval in accordance with points (a) and (b), the training organisation shall apply for and obtain an approval issued by the AUTHORITY. The application shall be submitted before any such change takes place in order to enable the AUTHORITY to determine continued compliance with this Regulation and to amend, if necessary, the training organisation certificate and related terms of approval attached to it.

Training organisations shall provide the AUTHORITY with all relevant documentation including the management of change process documentation and risk assessment.

Training organisations shall operate under the conditions prescribed by the AUTHORITY during such changes, as applicable.

- (d) Changes to the elements referred to in point (a) due to unforeseen circumstances shall be notified to the AUTHORITY without delay in order to obtain approval as necessary.
- (e) All changes not requiring prior approval shall be managed and notified to the AUTHORITY.
- (f) Training organisations shall notify the AUTHORITY when they cease their activities.

AMC1 CAR.ATCO.OR.B.015 Changes to the training organisation

- General
 - (a) Training organisations should inform the AUTHORITY of any changes to personnel specified in Part ATCO.OR that may affect the certificate or the training approval attached to it.
 - (b) Training organisations should send to the AUTHORITY each management system documentation amendment. Where the amendment requires The AUTHORITY's approval, the training organisation should receive it in writing.

GM1 CAR.ATCO.OR.B.015 Changes to the training organisation

- GENERAL
 - (a) Examples of changes that may affect the certificate or the terms of approval of the training organisation or the training organisation's management system are listed below:
 - (1) the name of the training organisation;
 - (2) change of legal entity;
 - (3) the training organisation's principal place of operation;
 - (4) the training organisation's type(s) of training;
 - (5) additional locations of the training organisation;
 - (6) additional courses, scope;
 - (7) addition or removal of equipment, simulator;
 - (8) the accountable manager;
 - (9) any of the persons referred to in Part ATCO.OR;
 - (10) the training organisation's documentation as required by Subpart ATCO.OR. B on safety policy and procedures;
 - (11) the facilities.
 - (b) Prior approval by the AUTHORITY is required for any changes to the training organisation's procedure describing how changes not requiring prior approval will be managed and notified to the AUTHORITY.

GM2 CAR.ATCO.OR.B.015 Changes to the training organisation

- **Change of Name**

A change of name requires the training organisation to submit a new application as a matter of urgency.

Where this is the only change to report, the new application can be accompanied by a copy of the documentation previously submitted to the AUTHORITY under the previous name, as a means of demonstrating how the training organisation complies with the applicable requirements.

CAR.ATCO.OR.B.020 Continued validity

- (a) A training organisation's certification shall remain valid for a period of two years and; subject to the certificate not being surrendered or revoked and subject to the training organisation remaining in compliance with the requirements of this Regulation, taking into account the provisions related to the handling of findings in accordance with ATCO.OR.B.030.
- (b) Continued validity shall be subject to a successful annual compliance audit of the training organization conducted by the CAA.
- (c) The certificate shall be returned to the AUTHORITY without delay upon its revocation or at the cease of all activities.

CAR.ATCO.OR.B.025 Access to training organisations' facilities and data

Training organisations and applicants for training organisation certificates shall grant access to any person authorised by or acting on behalf of the CAA to the relevant premises in order to examine the required records, data, training sites, procedures and any other material pertinent to the execution of the tasks of the AUTHORITY.

CAR.ATCO.OR.B.030 Findings

After receipt of notification of findings issued by the AUTHORITY, the training organisation shall:

- (a) identify the root cause of the finding;
- (b) define a corrective action plan; and
- (c) demonstrate the corrective action implementation to the satisfaction of the AUTHORITY within the period agreed with that authority.

GM1 CAR.ATCO.OR.B.030(a);(b) Findings

- Corrective Action Plan and Root Cause
- (a) Corrective action is the action to eliminate the root cause of a non-compliance in order to prevent its recurrence.
- (b) Determination of the root cause is crucial for defining effective corrective actions.

CAR.ATCO.OR.B.035 Immediate reaction to a safety problem

The training organisation shall implement any safety measures mandated by the AUTHORITY for the training organisation activities.

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SUBPART B– MANAGEMENT OF AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

CAR.ATCO.OR.C.001 Management system of training organisations

Training organisations shall establish, implement and maintain a management system that includes:

- (a) clearly defined lines of responsibility and accountability throughout the organisation, including direct safety accountability of the accountable manager;
- (b) a description of the overall principles of the organisation with regard to safety, referred to as the safety policy;
- (c) the identification of aviation safety hazards entailed by the activities of the training organisation, their evaluation and the management of associated risks, including actions to mitigate the risk and verify their effectiveness;
- (d) maintaining personnel trained and competent to perform their tasks;
- (e) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation;
- (f) a function to monitor compliance of the organisation with the relevant requirements. Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary;
- (g) the management system shall be proportionate to the size of the organisation and its activities, taking into account the hazards and associated risks inherent in those activities.

AMC1 CAR.ATCO.OR.C.001(b) Management system of training organisations

- Safety Policy

The safety policy should:

- (a) be endorsed by the accountable manager;
- (b) clearly identify safety as the highest organisational priority over commercial, operational, environmental or social pressures;
- (c) include a commitment to:
 - (1) improve towards the highest safety standards;
 - (2) comply with all applicable legal requirements, meet all applicable standards and consider best practices;
 - (3) provide appropriate resources; and
 - (4) enforce safety as the primary responsibility of all managers and staff;
- (d) be communicated, with visible endorsement, throughout the organisation;
- (e) include safety reporting and just culture principles;
- (f) enhance and embed safety culture and safety awareness; and
- (g) be periodically reviewed to ensure it remains relevant and appropriate to the training organisation.
- (h) Embed Threat and Error Management principles in all parts of training.

AMC1 CAR.ATCO.OR.C.001(c) Management system of training organisations

- Identification of Aviation Safety Hazards

For training organisations not providing on-the-job training, the hazard identification process may be limited to a demonstration that there are no hazards directly identified. However, the training should be designed so as to ensure future safe operations with application of Threat and Error Management (TEM) principles.

AMC1 CAR.ATCO.OR.C.001(d) Management system of training organisations

- Personnel

A training organisation should demonstrate that:

- (a) a list of activities with relevant needed competence has been established;
- (b) their personnel have the relevant competence needed to fulfil the activities they are required to perform and hold an appropriate authorization for the respective training organization;
- (c) their personnel maintain a level of competence through training as appropriate;
- (d) their theoretical and practical instructors are qualified in accordance with Part ATCO, Subpart C of this Regulation;
- (e) their assessors hold an assessor authorization; and

AMC1 CAR.ATCO.OR.C.001(e) Management system of training organisations

- Processes

Training organisations should demonstrate that the management system:

- (a) monitors policies, processes and procedures to ensure they are current and subject to periodic review and amendment, when necessary, to maintain their continued accuracy and suitability;
- (b) allows for the impromptu recognition and initiation of improvements to policies, processes and procedures between periodic reviews;
- (c) controls, records and tracks changes to all of the management system policy, process and procedure documents;
- (d) includes a master record index that lists all the policies, processes and procedures; and
- (e) includes as a minimum the following:
 - (1) master record index;
 - (2) training provider certificate;
 - (3) management structure;
 - (4) staff role profiles including accountabilities and responsibilities;
 - (5) training manuals, plans and courses;
 - (6) evidence of regulatory compliance;
 - (7) change control process;
 - (8) course design documents;
 - (9) instructor/assessor qualification, authorizations and competence records.

AMC1 CAR.ATCO.OR.C.001(f) Management system of training organisations

- Compliance Monitoring

- (a) The implementation and use of a compliance monitoring function should enable the training organisation to monitor compliance with the relevant requirements of this Regulation.
- (b) Training organisations should specify the basic structure of the compliance monitoring function applicable to the activities conducted.
- (c) The compliance monitoring function should be structured according to the activities of the training organisation to be monitored.

GM1 CAR.ATCO.OR.C.001(f) Management system of training organisations

- Example of Compliance Monitoring System

- (a) Training organisations may monitor compliance with the procedures they have designed to ensure safe activities. In doing so, they may, as a minimum, and, where appropriate, monitor:
 - (1) the organisational structure;
 - (2) the plans and objectives;
 - (3) the privileges of the organisation;
 - (4) personnel requirements:
 - (i) post holders
 - (ii) instructors and examiners
 - (5) the manuals, logs and records;

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- (6) the training standards;
 - (i) syllabus, course curriculum
 - (ii) training delivery, presentations
 - (iii) course preparation, lesson plans
 - (iv) instructional staff
 - (v) instructional material, instructor guides
 - (vi) student study material, study guides, books
 - (vii) equipment, simulators
 - (7) the management system.
- (b) Organisational set-up
- (1) To ensure that the training organisation continues to meet the requirements of this Regulation, the accountable manager may designate a person responsible for the compliance monitoring function whose role is to verify, by monitoring the activities of the organisation, that the standards required by this Regulation and any additional requirements as established by the organisation are met under the supervision of the relevant head of the functional area.
 - (2) The person designated for the compliance monitoring function should be responsible for ensuring that the compliance monitoring programme is properly implemented, maintained and continually reviewed and improved.
 - (3) The designated person responsible for the compliance monitoring function should:
 - (i) have direct access to the accountable manager; and
 - (ii) have access to all parts of the training organisation and, as necessary, to any contracted organisation.
- (c) Compliance monitoring documentation
- (1) Relevant documentation could include the relevant part(s) of the training organisation management system documentation.
 - (2) In addition, relevant documentation could also include the following:
 - (i) terminology;
 - (ii) specified activity standards;
 - (iii) description of the organisation;
 - (iv) allocation of duties and responsibilities;
 - (v) procedures to ensure regulatory compliance;
 - (vi) compliance monitoring programme, reflecting:
 - (A) schedule of the monitoring programme;
 - (B) audit procedures;
 - (C) reporting procedures;
 - (D) follow-up and corrective action procedures; and
 - (E) recording system;
 - (vii) training elements; and
 - (viii) document control.
- (d) Training
- (1) Correct and thorough training is essential to optimise compliance in every training organisation. In order to achieve significant outcomes of such training, the training organisation needs to ensure that all personnel understand the objectives laid down in the organisation's manual.
 - (2) Those responsible for managing the compliance monitoring function should receive training in this task. Such training could cover the requirements of compliance monitoring, manuals and procedures related to the task, audit techniques, reporting and recording.
 - (3) Time needs to be provided to train all personnel involved in compliance management and for briefing the rest of the personnel.
 - (4) The allocation of time and resources needs to be governed by the activities covered by the training organisation.
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AMC2 CAR.ATCO.OR.C.001(f) Management system of training organisations

- Compliance Monitoring

The person designated for the compliance monitoring function should be responsible for the review and continuous improvement of the established management system's policies, processes and procedures. The following tools are essential to the ongoing continuous improvement process:

- (a) organisational risk profile;
- (b) risk management plan;
- (c) coherence matrix;
- (d) corrective and preventive action reports; and
- (e) inspection and audit reports.

GM2 CAR.ATCO.OR.C.001(f) Management system of training organisations

- Compliance Monitoring

- (a) These tools and processes related to the compliance monitoring function are interrelated and help define the continuous improvement efforts of the organisation. For example, any corrective or preventive action report could identify a deficiency or an opportunity for improvement. The person responsible for the compliance monitoring function would then be required to ensure the identified issue was addressed and the corrective or preventive action effectively implemented. The same would be true if the discovery of an issue was identified during an inspection or audit.
- (b) The effective implementation of change and the subsequent validation that the change did result in the desired outcome is critical to the continuous improvement process. Simply introducing a well-meaning suggestion for improvement into the organisation without carefully managing that change could have undesirable consequences. It is, therefore, the responsibility of the person in charge of the compliance monitoring function to introduce, monitor and validate improvement efforts.
- (c) A simple but effective process to use in managing continuous improvement is known as the plan- do-check-act, or PDCA, approach:
 - (1) plan — map out the implementation of the recommended change, identifying at least:
 - (i) those people who will be affected by the change;
 - (ii) the required measures necessary to mitigate risk; and
 - (iii) the desired outcome and its intended consequences.
 - (2) do — execute the implementation plan once all affected groups have accepted the proposal and understand their role in ensuring its success;
 - (3) check — apply sufficient quality control 'stage' checks throughout the implementation phase to ensure any unintended deviations in the execution are identified and addressed without delay; and
 - (4) act — analyse the results and take appropriate action as necessary.

AMC1 CAR.ATCO.OR.C.001(g) Management system of training organisations

- Size, Nature and Complexity of The Activity

- (a) A training organisation should be considered as complex when it has a workforce of more than 20 full-time equivalents (FTEs).
- (b) A training organisation with up to 20 FTEs may also be considered complex based on an assessment of the following factors:
 - (1) the extent and scope of contracted activities subject to the certificate, in terms of complexity; and
 - (2) the different types of training provided, in terms of risk criteria.

CAR.ATCO.OR.C.005 Contracted activities

- (a) Training organisations shall ensure that when contracting or purchasing any parts of their activities, the contracted or purchased activity or part of activity conform to the applicable requirements.
- (b) When a training organisation contracts any part of its activity to an organisation that is not itself certified in accordance with this Regulation to carry out such activity, the contracted organisation shall work under the terms of approval contained in the certificate issued to the contracting training organisation and subject to audit and approval by the CAA. The contracting training organisation shall ensure that the AUTHORITY is given access to the contracted organisation to determine continued compliance with the applicable requirements.

GM1 CAR.ATCO.OR.C.005 Contracted activities

- Responsibility When Contracting Activities
 - (a) Regardless of the approval status of the contracted organisation, the contracting organisation is responsible to ensure that all contracted activities are subject to hazard identification and risk management as required by ATCO.OR.C.001(c) and to compliance monitoring as required by ATCO.OR.C.001(f).
 - (b) When the contracted organisation is itself certified to carry out the contracted activities, the organisation's compliance monitoring should at least check that the approval effectively covers the contracted activities and that it is still valid.

CAR.ATCO.OR.C.010 Personnel requirements

- (a) Training organisations shall appoint an accountable manager who has the authority for ensuring that all activities can be financed and carried out in accordance with the applicable requirements. The accountable manager shall be responsible for establishing and maintaining an effective management system.
- (b) A person shall be nominated by the training organisation with the responsibility for training as the head of Training (HT). Such person shall be ultimately responsible to the accountable manager.
- (c) A person shall be nominated by the training organisation with the responsibility for integration and direct supervision of theoretical and simulator training as the Chief Training Instructor (CTI). Such person shall be ultimately responsible to the Head of Training.
- (d) A person shall be nominated by the organisation as Compliance Monitoring Manager (CMM), with the responsibility of ensuring that the organisation remains in compliance with the applicable requirements. Such person shall be ultimately responsible to the accountable manager.
- (e) Training organisations shall have sufficient qualified personnel for delivering theoretical knowledge instructions of the planned tasks and activities to be performed in accordance with the applicable requirements.
- (f) Training organisations shall have sufficient qualified personnel for delivering practical / simulator training of the planned tasks and activities to be performed in accordance with the applicable requirements.
- (g) Training organisations shall maintain a record of theoretical knowledge instructors with their relevant instructional techniques assessment and subjects they are entitled to teach.
- (h) Training organisations shall establish a procedure to maintain competence of the theoretical instructors.
- (i) Training organisations shall ensure that practical instructors and assessors successfully complete refresher and updating training in order to revalidate the respective approvals.
- (j) Training organisations shall maintain a record of persons qualified for assessments within the training organization, for assessing practical/ simulator instructors' competence and assessors' competence.

GM1 CAR.ATCO.OR.C.010(b);(c) Personnel requirements

- (a) Training organisations may nominate the person responsible for training as Head of Training (HT) and a person or persons subordinate to him or her as chief training instructor (CTI).
- (b) Usually, training organisations nominate only one person responsible for training.
- (c) Prerequisites, typical function and responsibilities of the Head of Training (HT) responsible for training may be:
 - (1) to have extensive experience in instructing for all types of ATC training and possess sound managerial capability;
 - (2) to have overall responsibility for ensuring satisfactory integration of all training provided as per the approved training and procedures manual (TPM) and for supervising the progress of the persons undertaking training;
 - (3) to be responsible for coordinating and delegating the contact to the AUTHORITY in training-related issues;
 - (4) to ensure satisfactory integration of practical training on simulators and theoretical instruction;
 - (5) to be responsible for supervision, standardization updating training of all assessors performing theoretical and practical assessments within the training organization;
 - (6) to be responsible that the theoretical examinations are revised and updated on at least a six-monthly basis or before the six-month period as per the need; and
 - (7) to be ultimately responsible to the accountable manager.
- (d) Prerequisites, typical functions and responsibilities of the chief training instructor (CTI) may be:
 - (1) to have extensive experience in instructing for all types of ATC training and possess sound managerial capability;
 - (2) to have responsibility for ensuring satisfactory theoretical and practical training is provided as per the approved training and procedures manual (TPM) and for supervising the progress of the persons undertaking training in the areas that have been delegated by the person responsible for training;
 - (3) to have responsibility for the supervision, standardization and updating training of all theoretical and simulator / practical instructors; and
 - (4) to report to the Head of Training.

CAR.ATCO.OR.C.015 Facilities and equipment

- (a) Training organisations shall have facilities allowing the performance and management of all planned tasks and activities in accordance with this Regulation.
- (b) The training organisation shall ensure that the synthetic training devices are acceptable to the CAA and comply with the applicable specifications and requirements appropriate to the task.
- (c) During on-the-job training instruction, the ANSP shall ensure that the instructor has exactly the same information as the person undertaking OJT and the means to intervene immediately.

AMC1 CAR.ATCO.OR.C.015(a) Facilities and equipment

- (a) General areas

A training organisation should have access to facilities appropriate to the size and scope of the intended operations provided in an environment conducive to learning.

- (b) Training areas

For training organisations providing theoretical training, the facilities should also include sufficient suitably equipped classroom areas.

GM1 CAR.ATCO.OR.C.015(a) Facilities and equipment

(a) General areas

These facilities should include general areas, which consist of sufficient:

- (1) office space for managerial and administrative as well as training staff;
- (2) rooms for study and testing;
- (3) library facilities; and
- (4) storage areas, including secure areas for training and personnel records.

(b) Training areas

For training organisations providing practical training, the facilities should also include sufficient:

- (1) rooms for briefing and debriefing; and
- (2) suitably equipped rooms for practical training.

AMC1 CAR.ATCO.OR.C.015(b) Facilities and equipment

- Specifications for Synthetic Training Devices or Simulators

(a) Synthetic training devices classifications

Synthetic training devices used for training should be classified according to one of the following classifications:

- (1) simulator (SIM);
- (2) part-task trainer (PTT).

(b) Synthetic training device (STD) criteria

If an STD is used for training, it should be accepted by the AUTHORITY as part of the course approval process for any training plan. Training organisations should demonstrate how the STD will provide adequate support for the intended training, in particular, how the STD will meet the stated objectives of the practical training exercises and enable the performance objectives to be assessed to the level determined in the training programme.

This demonstration and the related documentation should include the following relevant criteria:

- (1) the general environment, which should provide an environment in which STD exercises may be run without undue interference from unrelated activities;
- (2) the STD layout;
- (3) the equipment provided;
- (4) the display presentation, functionality, and updating of operational information;
- (5) data displays, including strip displays, where appropriate;
- (6) coordination facilities;
- (7) aircraft performance characteristics, including the availability of manoeuvres, e.g. holding or instrumental landing system (ILS) operation, required for a particular simulation;
- (8) the availability of real-time changes during an exercise;
- (9) the processes by which the training organisation can be assured that staff associated with the training conducted with the use of an STD are competent;
- (10) the degree of realism of any voice recognition system associated with the STD; and
- (11) where a simulator is an integral part of an operational ATC system, the processes by which the training organisation is assured that interference between the simulated and operational environments is prevented.

The synthetic training device or simulator should be approved after an on-sight audit of the manufacturer by the CAA before the training organization is certified for initial, basic or rating courses. Any addition and modification to the simulator shall also follow the same procedure.

The extent to which the STD achieves the above criteria will be used to determine the adequacy of the STD for the proposed use. As a general principle, the greater the degree of replication of the operational position being represented, the greater the use will be possible for any particular training.

AMC2 CAR.ATCO.OR.C.015(b) Facilities and equipment

- Specifications for Synthetic Training Devices or Simulators
The STD proposed for acceptance should hold an acceptance or approval from the CAA of the state of manufacture.

CAR.ATCO.OR.C.020 Record keeping

- (a) Training organisations shall retain detailed records of persons undertaking or having undertaken training to show that all requirements of the training courses have been met.
- (b) Training organisations shall establish and maintain a system for recording the professional qualifications and instructional techniques assessments of instructors and assessors, as well as the subjects they are entitled to teach, where appropriate.
- (c) The records required in points (a) and (b) shall be retained for a minimum period of five years:
 - (1) after the person undertaking training has completed the course; and
 - (2) after the instructor or assessor ceases to perform a function for the training organisation, as applicable.
- (d) The archiving process including the format of the records shall be specified in the training organisation's management system.
- (e) Records shall be stored in a secure manner.

AMC1 CAR.ATCO.OR.C.020(a);(b) Record keeping

Training organisations should maintain the following records:

- (a) Records of persons undertaking training:
 - (1) personal information;
 - (2) details of training received including the starting date of the training, as well as the results of the examinations and assessments;
 - (3) detailed and regular progress report forms;
 - (4) certificate of completion of training courses.
- (b) Records of instructors and assessors:
 - (1) personal information;
 - (2) qualification records;
 - (3) records of refresher training for instructors and assessors;
 - (4) assessment reports;
 - (5) instructional and/or assessment time records.

Training organisations should submit training records and reports to the AUTHORITY as required. The CAA shall audit the records of the nominated instructors and assessors for their respective approvals.

CAR.ATCO.OR.C.025 Funding

Training organisations shall demonstrate that sufficient funding is available to conduct the training according to this Regulation and that the activities have sufficient finance cover in accordance with the nature of the training provided and all activities can be carried out in accordance with this Regulation.

AMC1 CAR.ATCO.OR.C.025 Funding

- Sufficient Funding

To demonstrate compliance with the requirement on the availability of sufficient funding, training organisations may be required to present an economic study identifying the minimum amount necessary to ensure that the training is conducted in accordance with the applicable requirements.

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SUBPART D - REQUIREMENTS FOR TRAINING COURSES AND TRAINING PLANS

CAR.ATCO.OR.D.001 Requirements for training courses and training plans

Training organisations shall develop:

- (a) training lesson plans and training courses associated to the type(s) of training provided in accordance with the requirements set out in Part ATCO, Subpart D;
- (b) subjects, subject objectives, topics and subtopics for rating endorsements in accordance with the requirements laid down in Part ATCO;
- (c) methods of assessments for instructors and assessors shall be in accordance with ATCO.D.090(a)(3) and ATCO.D.095(a)(3).

CAR.ATCO.OR.D.005 Examination and assessment results and certificates

- (a) The training organization shall be audited specifically for their ability to conduct the examinations and assessments on behalf of the CAA. The privilege to conduct the examinations shall be entered in the ATO certificate.
- (b) The training organization shall maintain complete records of the theoretical examinations and simulator assessments carried out under the scope of approval. All examinations and assessments shall be performed with a prior intimation to the CAA. The CAA may monitor the examinations and simulator assessments on a random basis.
- (c) The training organization shall continually improve and update the question bank at least every six months or before the six months period as per the need. A report shall be sent to the CAA for compliance to this requirement.
- (d) The training organisation shall make available to the applicant his/her results of examinations and assessments and, upon applicant's request, issue a certificate with his/her result of examinations and assessments.
- (e) Upon successful completion of initial training, or of rating training for the issue of an additional rating, the training organisation shall issue a certificate. A training organization shall not issue certificates outside their scope of approvals.
- (f) A certificate of completion of the basic training shall only be issued upon request of the applicant if all subjects, topics and subtopics contained in Appendix 2 of ATCO have been completed and the applicant has successfully passed the associated theoretical examinations and applicable practical assessments.

END