CAR ATCO
AIR TRAFFIC CONTROLLER LICENSING
AND
ATC TRAINING ORGANISATIONS

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FOREWORD

Purpose

(a) Federal Decree Law No. 4 of 1996 and Federal Decree Law No. 20 of 1991, of the United Arab Emirates, established the General Civil Aviation Authority (GCAA) as the Competent Authority with respect to civil aviation activities.

Note: A Competent Authority is any person or organization that has the legally delegated or invested authority, capacity, or power to perform a designated function. Similarly, once an authority is delegated to perform a certain act, only the Competent Authority is entitled to take accounts therefrom and no one else.

(b) The GCAA is required, under article 6 of the General Civil Aviation Law, to implement international agreements in the field of aviation, and by article 7 of the same Law, to promulgate policy for civil aviation and propose laws and regulations. Furthermore, Article 26 of the Civil Aviation Law requires the Competent Authority to issue licences for flight crew and other technical personnel in line with international standards.

(c) As the Competent Authority, the GCAA has implemented CAR-ATCO for the administration and licensing of air traffic controllers and air traffic controller training organizations. In addition, the licence maintenance requirements for air traffic controllers at operational Air Traffic Control units are contained within CAR-ANS PART-ATS.

(d) These regulations represent the minimum requirements designed to achieve an acceptable level of safety, considering the various nature of operations within the UAE. Service providers are expected to meet or exceed the regulations.

Interpretation

(a) The following terms have the corresponding meaning within this Regulation:

(1) May: The term ''may'' is used in the GCAA regulation to give permission to do or not to do something

(2) Shall: The term ''shall'' is used in the GCAA regulation to impose an obligation or a requirement or a prohibition

(3) Should:

(i) Should in an AMC: the term ''should'' is used to indicate any specification which is recognized as necessary in the interest of safety unless an alternative is accepted by the GCAA.

(ii) Should in a publication other than an AMC (GM, safety alert, etc): the term ''should'' is used to indicate any specification which is recognized as desirable in the interest of safety.

(b) The term 'Authority', or 'GCAA', may be used to refer to the General Civil Aviation Authority of the United Arab Emirates.

(c) The term 'certificate', or 'training provider certificate' refers to any certificate issued to a provider of air traffic controller training organisation (ATCTO) under this Regulation.

(d) The term 'training provider', 'ATS training provider', 'organisation', or 'ATCTO' may be used to refer to any entity that is required to meet the certification requirements of this regulation or is in possession of an Air Traffic Controller Training Organisation Certificate.

(e) The term "service" is used as an abstract noun to designate functions, or services rendered, and the term "unit" is used to designate a collective body performing a service at a location.

Implementing Rules (IR)

(a) Are binding in its entirety and used to specify a high and uniform level of safety and uniform conformity and compliance.

Acceptable Means of Compliance (AMC)

(a) Are non-binding. The AMC serves as a means by which the requirements contained in the Implementing Rules can be met. The use of an existing AMC gives the user the benefit of compliance with the IR. Where multiple AMC exist for an IR then all AMCs are applicable unless specified otherwise.

(b) However, applicants may propose to show compliance with the requirements using other means. Organisations may propose 'Alternative Means of Compliance' (AltMoC) that propose an alternative to an existing AMC, but this is subject to review and approval by the Authority. Alternative Means of Compliance proposals shall be accompanied by evidence of the ability to meet the intent of the IR.

Guidance Material (GM)

(a) Is non-binding explanatory and interpretation material on how to achieve the requirements contained in the IRs and the AMCs. It contains information, including examples, to assist the user in the interpretation and application of the requirements.

Documentation hierarchy

(a) UAE Civil Aviation Law.

(b) UAE Civil Aviation Regulations.

(c) Other regulatory material published by the Authority.

(d) ICAO Annexes.

(e) ICAO Documents.

Note: Article 19 of the UAE Civil Aviation Law (1991) states that "The Chicago Convention and other protocols and agreements pertaining to civil aviation and its protection, of which the State is a party, shall be considered complementary to the provisions of this Law in as much as they do not contradict its provisions".

References

(a) United Arab Emirates Civil Aviation Regulations:

(1) CAR VIII Subpart 1.

(2) CAR VIII Subpart 4.

(b) International Civil Aviation Organisation (ICAO):

(1) Annex 1.

(c) European Union, European Aviation Safety Agency (EASA):

(1) Regulation (EU) 2015/340.

(2) ED Decision 2015/010/R.

(3) ED Decision 2015/015/R.

(4) ED Decision 2019/004/R.

(5) ED Decision 2019/023/R.

Record of amendments

Issue	Date of Issue	Date of Applicability
01	12th September 2024	12th September 2025

Summary of changes in this version

(a) Entire new issue in performance-based format.

SUBPART – DEF (ATCO.DEF)
TERMS AND DEFINITIONS

ATCO.DEF.001 Applicability

(a) The definitions within this part shall be applicable within:

(1) CAR-ATCO

(b) Definitions shall be interpreted in the following order of precedence:

(1) CAR-ATCO

(2) CAR-DEF

(3) UAE Federal Laws

(4) ICAO

(5) Commonly Accepted Meanings

ATCO.DEF.010 Definitions

(a) In the context of Part-ATCO, the terms listed below have the following meaning:

(1) Abnormal situation

Circumstances, including degraded situations, which are neither routinely nor commonly experienced and for which an air traffic controller has not developed automatic skills;

(2) Air Traffic Control (ATC) service

A service provided for the purpose of:

(i) preventing collisions:

(a) between aircraft, and

(b) in the manoeuvring area between aircraft and obstructions; and

(ii) expediting and maintaining an orderly flow of air traffic;

(3) Air Traffic Control (ATC) unit

A generic term meaning variously, area control centre, approach control unit or aerodrome control tower;

(4) Assessment

An evaluation of the practical and theoretical 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;

(5) Assessor endorsement

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;

(6) Critical incident stress

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;

(7) Emergency situation

A serious and dangerous situation requiring immediate actions;

(8) Examination

A formalised test evaluating the person's knowledge and understanding;

(9) ICAO location indicator

The four-letter code group formulated in accordance with the rules prescribed by ICAO in its manual 'DOC 7910' in its latest updated version and assigned to the location of an aeronautical fixed station;

(10) Language proficiency endorsement

The statement entered on and forming part of a licence, indicating the language proficiency of the holder;

(11) Licence

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;

(12) Pre-On-the-job training instruction

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;

(13) On-the-job training instructor (OJTI) endorsement

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;

(14) Performance objective

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;

(15) Provisional inability

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;

(16) Psychoactive substance

Includes alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas caffeine and tobacco are excluded;

(17) Rating endorsement

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

(18) Renewal

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;

(19) Revalidation

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;

(20) Sector

A part of a control area and/or part of a flight information region or upper region;

(21) Simulator

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;

(22) Training course

Theoretical and/or practical instruction developed within a structured framework and delivered within a defined duration;

(23) Training organisation

An organisation which has been certified by the competent authority to provide one or more types of training;

(24) Unit endorsement

The authorisation entered on and forming part of a licence, indicating the ICAO location indicator where the licence holder is competent to work;

(25) Validation

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.

PART-ATCO
REQUIREMENTS FOR THE LICENSING OF AIR TRAFFIC CONTROLLERS

SUBPART – A (ATCO.A)
REQUIREMENTS FOR THE LICENSING OF AIR TRAFFIC CONTROLLERS

ATCO.A.001 Scope

(a) 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.

GM1 ATCO.A.001 Scope

(a) When the term licence is used alone in this part, it must mean the Air Traffic controller licence and Student Air Traffic controller licence.

ATCO.A.002 Competent Authority

(a) For the purpose of this regulation, the competent authority shall be the General Civil Aviation Authority (GCAA), hereinafter referred to as the Authority.

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 Authority.

(c) The licence shall remain the property of the person to whom it is issued, unless it is revoked by the competent 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 ATCO.A.005 Application for the issue of licences, ratings and endorsements

(a) 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 GCAA E-Licensing services for the corresponding request.

GM1 ATCO.A.005 Application for the issue of licences, ratings and endorsements

ELECTRONIC LICENCE

(a) Any application when duly approved by the Authority will result in immediate issuance of an electronic licence. The electronic licence will be in a portable document format (.pdf) and will be automatically emailed to the E-Licensing user (ANSP) through the GCAA e-services.

(b) The licence will bear all the required details in compliance with the Civil Aviation Regulations and ICAO Annex 1, Chapter 5. Additionally, the electronic licence will also bear a QR Code that will reveal the licence details as per the GCAA E-licensing system.

(c) The E-licensing user is responsible for printing the licence and handing it over to the licence holder for his/her signature before exercising the privileges of the licence. The organisations must maintain a proper record keeping system for the electronic licences received from the Authority and the printed licences signed by the licence holders.

ATCO.A.010 Foreign licence conversion

(a) A foreign ATC Licence and associated ratings, issued by an ICAO Contracting State may be converted to a UAE 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 a UAE ANSP/ ATC unit after ensuring the following pre-requisites:

(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 UAE 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 ATCO.A.010 Foreign licence conversion

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

AMC2 ATCO.A.010 Foreign licence conversion

(a) Subsequent addition of ratings may be approved if the foreign licence holder has had the rating endorsed on his/her foreign licence. In other cases, the applicant should have to undergo an approved rating course followed by the requisite experience requirements approved for the ATC unit.

AMC3 ATCO.A.010 Foreign licence conversion

(a) 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 Authority upon completion of other requirements as stated in this part.

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

(a) The Authority expects that the ATS unit conducts exhaustive evaluations of any foreign ATCOs prior to applying for the licence conversion such as rating validations, experiences and disciplinary records.

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 ANSP of the provisional inability to exercise the privileges of their licence.

(c) ANSP 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) ANSP 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 competent authority as defined in that procedure.

(e) The procedures referred to in point (d) shall be included in the unit competence scheme.

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

GROUNDS FOR PROVISIONAL INABILITY

(a) Examples of grounds for doubting the ability to safely exercise the privileges of the licence may be that the licence holder is:

(1) under the influence of psychoactive substances;

(2) unfit to perform the duties due to injury, fatigue, sickness, stress, including critical incident stress or other similar causes;

(3) not meeting all the competence-related requirements set out in the unit competence scheme.

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

(a) In case of doubt about the medical condition of the air traffic controller, the provisions of CAR.MED.A.020 applies.

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

PROCEDURES

(a) 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 competent authority should include but are not limited to:

(1) the processes to declare and terminate provisional inability;

(2) an indicative list of cases when the competent authority must be informed of the declaration or termination of the provisional inability;

(3) the processes to inform the competent authority; and

(4) the mitigating measures to be implemented to ensure sufficient capacity and the continuity of the service.

ATCO.A.020 Revocation and suspension of licences, ratings and endorsements

(a) Licences, ratings and endorsements may be suspended or revoked by the competent authority according to this regulation and associated 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 Authority 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 is revoked.

SUBPART – B (ATCO.B)
LICENCES, RATINGS AND ENDORSEMENTS

ATCO.B.001 Student air traffic controller licence

(a) Holders of a student air traffic controller licence shall be authorised 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 organisation certified by the Authority in accordance with the requirements laid down in Part ATO 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 in accordance with CAR-MED requirements;

(4) have demonstrated an adequate level of English proficiency in accordance with the requirements set out in ATCO.B.030.

(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 in accordance with the requirements laid down in Part ATO 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.

(e) The Assessment of Previous Competence (APC) shall also be applicable to:

(1) Military ATCOs not holding an ICAO recognised ATC license, or who cannot provide evidence of civilian experience. Military ATCO shall also provide evidence of ICAO initial training. 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 shall 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;

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

MATURITY OF AIR TRAFFIC CONTROLLERS

(a) Persons who wish to undertake air traffic controller training at a training organisation satisfying the requirements laid down in Part ATO 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 ATCO.B.001(d); (e) Student air traffic controller licence

ASSESSMENT OF PREVIOUS COMPETENCE (APC)

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

(b) The training organisation should conclude the APC with a report indicating the training needs.

GM1 ATCO.B.001(d); (e) Student air traffic controller licence

(a) The APC is not applicable:

(1) F For an applicant who completed initial course and did not start the corresponding OJT within 2 years.

(2) If the privileges of a particular rating have not been exercised for 4 years or more. In this case, the ATC licence holder must complete an initial training refresher course applicable to the rating and approved by the Authority.

GM2 ATCO.B.001(d); (e) Student air traffic controller licence

(a) These APC requirements are for ATC Training Organisations, the APC requirements for operational ATS units are contained in CAR-ANS PART-ATS.

ATCO.B.005 Air traffic controller licence

(a) Holders of an air traffic controller licence shall be authorised 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;

(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;

(4) hold a valid medical certificate; and

(5) have demonstrated an adequate level of English language proficiency in accordance with the requirements set out in ATCO.B.030.

(d) The air traffic controller licence shall be validated by the inclusion of one or more ratings and English language proficiency endorsements 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, as described in ATCO.B.001, 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 two years subject to maintenance of at least one ATC rating, English language proficiency and an appropriate medical certificate.

AMC1 ATCO.B.005 Air traffic controller licence

(a) Any person holding an Air traffic controller licence issued by the Authority 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.

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 authorised to provide:

(1) Aerodrome control rating (ADC) rating, indicating that the licence holder is competent to provide 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 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 an air traffic control service to arriving, departing or transiting aircraft with the use of surveillance equipment;

(4) the Area Control Surveillance (ACS) rating, indicating that the licence holder is competent to provide 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, as described in ATCO.B.001, as to whether the person concerned continues to satisfy the conditions of that rating, and after satisfying any training requirements resulting from this assessment.

AMC1 ATCO.B.010(b) Air traffic controller ratings

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.

ATCO.C.020 Unit Endorsements

(a) The OJTI endorsement shall entitle the holder of a licence to conduct On-the-Job Training (OJT) in simulators, and at operational control positions on which the holder is currently competent.

(b) The EXM endorsement shall entitle the holder of a licence to conduct examinations for CoC at operational control positions on which the holder is currently competent.

ATCO.B.030 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), minimum operational (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 competent authority.

(e) English Language proficiency shall be demonstrated by a certificate attesting the result of the assessment.

AMC1 ATCO.B.030 English Language proficiency endorsement

(a) For Licensing and endorsement purposes, the Authority only accepts ELP certificates issued by ELP testing organizations approved by the Authority.

(b) In case of foreign licence conversions, the ELP from a foreign licence will be accepted at level 4 for endorsement on a GCAA issued ATCO licence.

ATCO.B.035 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 ATCO.B.035 (c) Validity of English language proficiency endorsement

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

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 competent 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 Competent authority

AMC1 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 ATCO.B.040 Assessment of English language proficiency

ASSESSMENT

(a) 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 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 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:

(i) preparation of individual assessment;

(ii) administration: location(s), identity check and invigilation, assessment discipline, confidentiality/security;

(iii) reporting and documentation provided to the competent authority and/or to the applicant, including sample certificate; and

(iv) retention of documents and records.

(e) The assessment documentation and records should be kept for a period of at least 5 years and should be made available to the competent authority upon request.

GM1 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 ATCO.B.040 Assessment of English language proficiency

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

SUBPART – C (ATCO.C)
AIR TRAFFIC CONTROLLER TRAINING

SECTION 1 – General requirements

ATCO.C.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.

ATCO.C.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;

(2) unit training, leading to the issue of an air traffic controller licence, the issue of a rating endorsement, the validation of rating(s) or rating endorsement(s) and/or the issue or renewal of a unit endorsement. It comprises the following phases:

(i) Pre-on-the-job training phase, designed primarily to impart knowledge and understanding of site-specific operational procedures and task-specific aspects; and

(ii) on-the-job training phase, which is the final 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.

(iii) In addition to points (i) and (ii), for unit endorsement(s) that require the handling of complex and dense traffic situations, a pre-on-the-job training phase is required to enhance the previously acquired rating routines and skills and to prepare for live traffic situations which may be encountered in that unit;

(3) continuation training, designed to maintain the validity of the endorsements of the licence, consisting of:

(i) refresher training;

(ii) conversion training, when relevant.

GM1 ATCO.C.005 Types of air traffic controller training

(a) The requirements for initial training are defined in this regulation.

(b) The requirements for unit training and continuation training are defined in CAR-ANS PART-ATS.

SECTION - 2- Initial training requirements

ATCO.C.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.

AMC1 ATCO.C.010(a) Composition of initial training

GENERAL

(a) Please refer to the Appendix 2.

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

BASIC TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES

(a) Please refer to the Appendix 2.

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

AERODROME CONTROL RATING (ADC) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES

(a) Please refer to the Appendix 3.

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

APPROACH CONTROL PROCEDURAL RATING (APP) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES

(a) Please refer to the Appendix 4.

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

APPROACH CONTROL SURVEILLANCE RATING (APS) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES

(a) Please refer to the Appendix 6.

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

AREA CONTROL SURVEILLANCE RATING (ACS) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES

(a) Please refer to the Appendix 7.

GM1 ATCO.C.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 4 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.

ATCO.C.015 Initial training plan

(a) An initial training plan shall be established by the training organisation and approved by the competent authority. It shall contain at least:

(1) the composition of the initial training course provided according to ATCO.C.010;

(2) the structure of the initial training provided according to ATCO.C.020(b);

(3) the process for the conduct of the initial training course(s);

(4) the training methods;

(5) minimum and maximum duration of the initial training course(s);

(6) with regard to ATCO.C.010(b), process for adapting the initial training course(s) to take due account of a successfully completed basic training course;

(7) processes for examinations and assessments according to ATCO.C.025 and ATCO.C.035, as well as performance objectives according to ATCO.C.030 and ATCO.C.040;

(8) training personnel qualifications, roles and responsibilities;

(9) process for early termination of training;

(10) the appeal process;

(11) identification of records to be kept specific to initial training;

(12) process and reasons for reviewing and amending the initial training plan and its submission to the competent authority. The review of the initial training plan shall take place at least once every three years.

ATCO.C.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 competent 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.

ATCO.C.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.C.030 shall be conducted on a simulator.

(d) A pass in assessment(s) shall be awarded to an applicant who consistently demonstrates the required performance as listed in ATCO.C.030 and shows the behaviour required for safe operations within the air traffic control service.

ATCO.C.030 Basic training performance objectives

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

(1) checking and using the working position equipment;

(2) developing and maintaining situational awareness by monitoring traffic and identifying aircraft when applicable;

(3) monitoring and updating flight data display(s);

(4) maintaining a continuous listening watch on the appropriate frequency;

(5) issuing appropriate clearances, instructions and information to traffic;

(6) using approved phraseology;

(7) communicating effectively;

(8) applying separation;

(9) applying coordination as necessary;

(10) applying the prescribed procedures for the simulated airspace;

(11) detecting potential conflicts between aircraft;

(12) appreciating priority of actions;

(13) choosing appropriate separation methods.

ATCO.C.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.C.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.C.040 and shows the behaviour required for safe operations within the air traffic control service.

ATCO.C.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 (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 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 ATCO.C.040 Rating training performance objectives

GENERAL

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

PART-ATO
REQUIREMENTS FOR AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

SUBPART A (ATO.A)
GENERAL REQUIREMENTS

ATO.A.001 Scope

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

SUBPART B – (ATO.B)
REQUIREMENTS FOR AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

ATO.B.001 Application for a training organisation certificate

(a) Applications for a training organisation certificate shall be submitted to the competent authority in due time to allow the competent 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 competent 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 person(s) nominated by the training organisation as the focal point(s) for communication with the competent 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

AMC1 ATO.B.001(c)(2) Application for a training organisation certificate

(a) Applicants for the issue of a certificate as an approved Air traffic control training organisation (ATCTO) should provide the Authority with:

(1) The following information:

(i) Name and address of the training organisation;

(ii) Date of intended commencement of activity;

(iii) Security clearance issued by the GCAA Security Department

(iv) Personal details and qualifications

(v) Name and address(s) of the facility (s) and/or operating site(s) at which the training is to be conducted;

(vi) List of courses.

(vii) List of simulation training devices that the training organisation intends to use, if applicable;

(viii) The type of training that the training organisation wishes to provide and the corresponding training programme;

(ix) Any other documentation or information required as outlined by the Authority, and

(2) The operations and training manuals.

ATO.B.005 Means of compliance

(a) Alternative means of compliance to the AMC adopted by the competent 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 competent 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 ATO.B.005 Means of compliance

DEMONSTRATION OF COMPLIANCE

(a) 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 competent authority is reached.

ATO.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.

AMC1 ATO.B.010(a) Terms of approval and privileges of a training organisation certificate

(a) 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.

ATO.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 competent authority.

(b) Training organisations shall agree with the competent 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 competent authority. The application shall be submitted before any such change takes place in order to enable the competent 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.

(d) Training organisations shall provide the competent authority with all relevant documentation including the management of change process documentation and risk assessment.

(e) Training organisations shall operate under the conditions prescribed by the competent authority during such changes, as applicable.

(f) Changes to the elements referred to in point (a) due to unforeseen circumstances shall be notified to the competent authority without delay in order to obtain approval as necessary.

(g) All changes not requiring prior approval shall be managed and notified to the competent authority.

(h) Training organisations shall notify the competent authority when they cease their activities.

AMC1 ATO.B.015 Changes to the training organisation

GENERAL

(a) Training organisations should inform the competent authority of any changes to personnel specified in Part ATO that may affect the certificate or the training approval attached to it.

(b) Training organisations should send to the competent authority each management system documentation amendment. Where the amendment requires the competent authority's approval, the training organisation should receive it in writing.

GM1 ATO.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 ATO;

(10) the training organisation's documentation as required by Subpart ATO.B on safety policy and procedures;

(11) the facilities.

(b) Prior approval by the competent 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 competent authority.

GM2 ATO.B.015 Changes to the training organisation

CHANGE OF NAME

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

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

ATO.B.020 Continued validity

(a) A training organisation's certification shall remain valid 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 ATO.B.030.

(b) Continued validity shall be subject to a successful annual compliance audit of the training organization conducted by the Authority.

(c) The certificate shall be returned to the competent authority without delay upon its revocation or the cease of all activities.

ATO.B.025 Access to training organisations' facilities and data

(a) Training organisations and applicants for training organisation certificates shall grant access to any person authorised by or acting on behalf of the Authority 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 competent authority.

ATO.B.030 Findings

(a) After receipt of notification of findings issued by the competent authority, the training organisation shall:

(1) identify the root cause of the finding;

(2) define a corrective action plan; and

(3) demonstrate the corrective action implementation to the satisfaction of the competent authority within the period agreed with that authority.

GM1 ATO.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.

GM2 ATO.B.030(c) Findings

COMPETENT AUTHORITY

(a) When reference is made to the competent authority, this means the General Civil Aviation Authority (GCAA).

ATO.B.035 Immediate reaction to a safety problem

(a) The training organisation shall implement any safety measures mandated by the Authority for the training organisation activities.

SUBPART C – (ATO.C)
MANAGEMENT OF AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

ATO.C.001 Management system of training organisations

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

(1) clearly defined lines of responsibility and accountability throughout the organisation, including direct safety accountability of the accountable manager;

(2) a description of the overall principles of the organisation with regard to safety, referred to as the safety policy;

(3) 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;

(4) maintaining personnel trained and competent to perform their tasks;

(5) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation;

(6) 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;

(7) 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 ATO.C.001(a)(2) Management system of training organisations

SAFETY POLICY

(a) The safety policy should:

(1) be endorsed by the accountable manager;

(2) clearly identify safety as the highest organisational priority over commercial, operational, environmental or social pressures;

(3) include a commitment to:

(i) improve towards the highest safety standards;

(ii) comply with all applicable legal requirements, meet all applicable standards and consider best practices;

(iii) provide appropriate resources; and

(iv) enforce safety as the primary responsibility of all managers and staff;

(4) be communicated, with visible endorsement, throughout the organisation;

(5) include safety reporting and just culture principles;

(6) enhance and embed safety culture and safety awareness; and

(7) be periodically reviewed to ensure it remains relevant and appropriate to the training organisation.

(8) Embed Threat and Error Management principles in all parts of training.

AMC1 ATO.C.001(a)(3) Management system of training organisations

IDENTIFICATION OF AVIATION SAFETY HAZARDS

(a) 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 ATO.C.001(a)(4) Management system of training organisations

PERSONNEL

(a) A training organisation should demonstrate that:

(1) a list of activities with relevant needed competence has been established;

(2) 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;

(3) their personnel maintain a level of competence through training as appropriate;

(4) their theoretical and Simulator Instructors are qualified in accordance with Part ATCO, Subpart C of this Regulation;

(5) their assessors hold an assessor authorization;

AMC1 ATO.C.001(a)(5) Management system of training organisations

PROCESSES

(a) Training organisations should demonstrate that the management system:

(1) 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;

(2) allows for the impromptu recognition and initiation of improvements to policies, processes and procedures between periodic reviews;

(3) controls, records and tracks changes to all of the management system policy, process and procedure documents;

(4) includes a master record index that lists all the policies, processes and procedures; and

(5) includes as a minimum the following:

(i) master record index;

(ii) training provider certificate;

(iii) management structure;

(iv) staff role profiles including accountabilities and responsibilities;

(v) training manuals, plans and courses;

(vi) evidence of regulatory compliance;

(vii) change control process;

(viii) course design documents;

(ix) instructor/assessor qualification, authorizations and competence records.

AMC1 ATO.C.001(a)(6) 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 ATO.C.001(a)(6) 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) the manuals, logs and records;

(5) the training standards;

(i) training delivery, presentations

(ii) course preparation, lesson plans

(iii) instructional staff

(iv) instructional material, study guides, books

(v) equipment, simulators

(6) 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.

AMC2 ATO.C.001(a)(6) Management system of training organisations

COMPLIANCE MONITORING

(a) 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:

(1) organisational risk profile;

(2) risk management plan;

(3) coherence matrix;

(4) corrective and preventive action reports; and

(5) inspection and audit reports.

GM2 ATO.C.001(a)(6) 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 ATO.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.

ATO.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 Authority. The contracting training organisation shall ensure that the competent authority is given access to the contracted organisation to determine continued compliance with the applicable requirements.

GM1 ATO.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 ATO.C.001(c) and to compliance monitoring as required by ATO.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.

ATO.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 or persons shall be nominated by the training organisation with the responsibility for training. Such person or persons shall be ultimately responsible to the accountable manager.

(c) A person or group of persons shall be nominated by the organisation, with the responsibility of ensuring that the organisation remains in compliance with the applicable requirements. Such person(s) shall be ultimately responsible to the accountable manager.

(d) Training organisations shall have sufficient qualified personnel for the planned tasks and activities to be performed in accordance with the applicable requirements.

(e) Training organisations shall maintain a record of theoretical instructors with their relevant professional qualifications, adequate knowledge and experience and their demonstration, instructional techniques assessment and subjects they are entitled to teach.

(f) Training organisations shall establish a procedure to maintain competence of the theoretical instructors.

(g) Training organisations shall ensure that Simulator Instructors and assessors successfully complete refresher training in order to revalidate the respective endorsement.

(h) Training organisations shall maintain a record of persons qualified for assessing Simulator Instructors' competence and assessors' competence, in accordance with ATO.E.201, with their relevant endorsements.

GM1 ATO.C.010(b);(c) Personnel requirements

(a) Training organisations may nominate the person responsible for training and a person or persons subordinate to him or her as chief training instructor(s)/unit responsible training officer(s).

(b) Usually, training organisations nominate only one person responsible for training.

(c) Prerequisites, typical function and responsibilities of the person 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 and for supervising the progress of the persons undertaking training;

(3) to be responsible for coordinating and delegating the contact to the competent authority in training-related issues; and

(4) to be ultimately responsible to the accountable manager.

(d) Prerequisites, typical functions and responsibilities of the chief training instructor(s)/unit responsible training officer(s) 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 training is provided and for supervising the progress of the persons undertaking training in the areas that have been delegated by the person responsible for training; and

(3) to report to the person responsible for training.

ATO.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 simulator training devices are acceptable to the GCAA and comply with the applicable specifications and requirements appropriate to the task.

AMC1 ATO.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 ATO.C.015(a) Facilities and equipment

(a) General areas

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

(i) office space for managerial and administrative as well as training staff;

(ii) rooms for study and testing;

(iii) library facilities; and

(iv) storage areas, including secure areas for training and personnel records.

(b) Training areas

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

(i) rooms for briefing and debriefing; and

(ii) suitably equipped rooms for practical training.

AMC1 ATO.C.015(b) Facilities and equipment

SPECIFICATIONS FOR SIMULATORS

(c) Simulator criteria

(1) If a simulator is used for training, it should be accepted by the competent authority as part of the course approval process for any training plan. Training organisations should demonstrate how the simulator will provide adequate support for the intended training, in particular, how the simulator 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.

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

(i) the general environment, which should provide an environment in which simulator exercises may be run without undue interference from unrelated activities;

(ii) the simulator layout;

(iii) the equipment provided;

(iv) the display presentation, functionality, and updating of operational information;

(v) data displays, including strip displays, where appropriate;

(vi) coordination facilities;

(vii) aircraft performance characteristics, including the availability of manoeuvres, e.g. holding or instrumental landing system (ILS) operation, required for a particular simulation;

(viii) the availability of real-time changes during an exercise;

(ix) the processes by which the training organisation can be assured that staff associated with the training conducted with the use of a simulator are competent;

(x) the degree of realism of any voice recognition system associated with the simulator; and

(xi) 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.

(3) The extent to which the simulator achieves the above criteria will be used to determine the adequacy of the simulator 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.

ATO.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 ATO.C.020(a);(b) Record keeping

(a) Training organisations should maintain the following records:

(1) Records of persons undertaking training:

(i) personal information;

(ii) details of training received including the starting date of the training, as well as the results of the examinations and assessments;

(iii) detailed and regular progress report forms;

(iv) certificate of completion of training courses.

(2) Records of instructors and assessors:

(i) personal information;

(ii) qualification records;

(iii) records of refresher training for instructors and assessors;

(iv) assessment reports;

(v) instructional and/or assessment time records.

(b) Training organisations should submit training records and reports to the competent authority as required.

ATO.C.025 Funding

(a) 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 ATO.C.025 Funding

SUFFICIENT FUNDING

(a) 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.

SUBPART D – (ATO.D)
REQUIREMENTS FOR
TRAINING COURSES AND TRAINING PLANS

ATO.D.001 Requirements for training courses and training plans

(a) Training organisations shall develop:

(1) 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;

(2) subjects, subject objectives, topics and subtopics for rating endorsements in accordance with the requirements laid down in Part ATCO;

(3) methods of assessments in accordance with ATO.E.105(a)(3) and ATO.E.220(a)(3).

ATO.D.005 Examination and assessment results and certificates

(a) 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.

(b) Upon successful completion of initial training, or of rating training for the issue of an additional rating, the training organisation shall issue a certificate.

(c) 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.

SUBPART E – (ATO.E)
REQUIREMENTS FOR ATO INSTRUCTORS AND ASSESSORS

SECTION 1 - Instructors

ATO.E.101 ATO Theoretical Knowledge Instructors

(a) Theoretical training shall only be carried out by appropriately qualified Theoretical Knowledge Instructors (TKI).

(b) A Theoretical Knowledge Instructor is appropriately qualified if he/she:

(1) holds 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 organisation;

(2) has demonstrated instructional skills to the training organisation.

GM1 ATO.E.101(b)(1) Theoretical Knowledge Instructors

QUALIFICATION OF THEORETICAL KNOWLEDGE INSTRUCTORS

(a) 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 ATO.E.101(b)(2) Theoretical Knowledge Instructors

INSTRUCTIONAL SKILLS FOR THEORETICAL KNOWLEDGE INSTRUCTORS

(a) A satisfactory demonstration of instructional skills for Theoretical Knowledge Instructors should establish competence at least in the following areas:

(1) lesson objectives are defined and communicated;

(2) subject questions are fully answered;

(3) visual aids are used appropriately;

(4) language is unambiguous;

(5) the lesson is correctly summarised; and

(6) lesson objectives are fulfilled.

ATO.E.105 Training of Simulator Instructors

(a) Training of Simulator 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 Simulator Instructors.

(b) The training courses and assessment methods referred to in point (a) shall be approved by the competent authority.

AMC1 ATO.E.105(a)(1) Training of Simulator Instructors

ASSESSMENT OF INSTRUCTIONAL TECHNIQUES FOR SIMULATOR INSTRUCTORS

(c) A successful assessment of instructional techniques for Simulator Instructors should establish competence at least in the following areas:

(1) regulatory impact on air traffic controller training;

(2) human factors impact on air traffic controller training;

(3) determination of the background and experience of the person undertaking training;

(4) determination of the current level of ability of the person undertaking training;

(5) conduct of a pre-session briefing;

(6) planning and conduct of the training session;

(7) demonstration and explanation of the tasks;

(8) monitoring of the training session;

(9) management of interventions correctly, including error correction;

(10) evaluation of the performance of the person undertaking training;

(11) debrief of the person undertaking training;

(12) furnishing of written reports on the performance of the person undertaking training;

(13) taking appropriate follow-up action towards resolving training problems;

(14) techniques of pausing clocks; and

(15) knowledge of technical facilities/environment.

AMC1 ATO.E.105(a)(2) Training of Simulator Instructors

REFRESHER TRAINING IN PRACTICAL INSTRUCTIONAL SKILLS

(a) Refresher training in practical instructional skills should prevent knowledge and skills erosion.

GM1 ATO.E.105 Training of Simulator Instructors

PRACTICAL INSTRUCTIONAL TECHNIQUES COURSE FOR OJTI'S

(a) Further information regarding the practical instructional techniques course for OJTIs can be found in ICAO Document 9868.

SECTION 2 - Assessors

ATO.E.201 ATO Assessor privileges

(a) A person shall only carry out assessments at an ATCTO when he/she holds an assessor certification.

(b) Holders of an assessor certification are authorised to carry out assessments at the ATCTO:

(1) during initial training for the issue of a student air traffic controller licence and/or for the issue of a new rating;

(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 Simulator Instructors or applicant assessors when compliance with the requirements of point (d)(1) to (3) is ensured.

(c) Holders of an assessor certification shall only exercise the privileges of the certificate 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 practices.

ATO.E.205 Vested interests

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

ATO.E.210 Application for assessor certification

(a) Applicants for the issue of an assessor certificate shall:

(1) have exercised the privileges of an air traffic controller licence for the specific rating for at least three years

(2) within the year preceding the application have successfully completed a GCAA approved assessor course during which the required knowledge and skills are taught using theoretical and practical methods; and

(3) have successfully completed an assessor competence assessment

ATO.E.215 Validity of assessor certification

(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 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 practices; and

(2) successfully passing an assessor competence assessment;

within the year preceding the application for renewal and meeting ATCO.C.060 (b)

(d) 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 ATO.E.215(b) Validity of assessor certification

REVALIDATION

(a) Successful completion of the refresher training in assessment skills and current practices 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) Current 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.

ATO.E.220 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 competent authority.

AMC1 ATO.E.220(a)(1) Training of assessors

ASSESSOR TRAINING COURSE

(a) 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:

(1) regulatory environment and legal obligations;

(2) types of assessment and their application;

(3) performance objectives constituting air traffic controller competence;

(4) conditions of assessments to create reliable results;

(5) processing of assessments and administrative procedures;

(6) giving verbal feedback and writing assessment reports;

(7) vested interests and code of conduct;

(8) accurately assessing competence against the performance objectives;

(9) developing a good questioning technique and designing questions appropriate to the assessment.

AMC2 ATO.E.220(a)(1) Training of assessors

ASSESSMENT OF ASSESSOR COMPETENCE

(a) 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 ATO.E.220(a)(2) Training of assessors

REFRESHER TRAINING IN ASSESSMENT SKILLS

(a) 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.

GM1 ATO.E.220(a)(3) Training of assessors

ASSESSMENT OF ASSESSOR COMPETENCE

(a) 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.

APPENDICES TO CAR-ATCO

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

LANGUAGE PROFICIENCY RATING SCALE: EXPERT, EXTENDED AND OPERATIONAL LEVELS

Level	**Pronunciation** *Uses a dialect and/or accent intelligible to the aeronautical community*	**Structure** *Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task*	**Vocabulary**	**Fluency**	**Comprehension**	**Interactions**
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, rarely interfere with	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are attempted but with	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete, and work-related	Able to speak at length with relative ease on familiar topics, but may not vary speech flow as a stylistic device. Can make use of	Comprehension is accurate on common, concrete, and work-related topics and mostly accurate when the speaker is confronted	Responses are immediate, appropriate, and informative. Manages the speaker/listener

Level	**Pronunciation** *Uses a dialect and/or accent intelligible to the aeronautical community*	**Structure** *Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task*	**Vocabulary**	**Fluency**	**Comprehension**	**Interactions**
	ease of understanding.	errors which sometimes interfere with meaning.	topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	appropriate discourse markers or connectors.	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 circumstances.	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 communication. Can make limited use of discourse markers or	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 linguistic or situational complication or an unexpected turn of	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 by checking, confirming, or clarifying.

Level	**Pronunciation** *Uses a dialect and/or accent intelligible to the aeronautical community*	**Structure** *Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task*	**Vocabulary**	**Fluency**	**Comprehension**	**Interactions**
				connectors. Fillers are not distracting.	events, comprehension may be slower or require clarification strategies.	

LANGUAGE PROFICIENCY RATING SCALE: PRE-OPERATIONAL, ELEMENTARY AND PRE-ELEMENTARY LEVELS

Level	**Pronunciation** *Uses a dialect and/or accent intelligible to the aeronautical community*	**Structure** *Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task*	**Vocabulary**	**Fluency**	**Comprehension**	**Interactions**
Pre-operational 3	Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation and frequently interfere with ease of understanding.	Basic grammatical structures and sentence patterns associated with predictable situations are not always well controlled. Errors frequently interfere with meaning.	Vocabulary range and accuracy are often sufficient to communicate on common, concrete, or work-related topics but range is limited and the word choice often inappropriate. Is often unable to paraphrase successfully when lacking vocabulary.	Produces stretches of language, but phrasing and pausing are often inappropriate. Hesitations or slowness in language processing may prevent effective communication. Fillers are sometimes distracting.	Comprehension is often accurate on common, concrete, and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. May fail to understand a linguistic or situational complication or an unexpected turn of events.	Responses are sometimes immediate, appropriate, and informative. Can initiate and maintain ex- changes with reasonable ease on familiar topics and in predict- able situations. Generally inadequate when dealing with an unexpected turn of events.
Elementary 2	Pronunciation, stress, rhythm and intonation are heavily influenced by the first language or regional variation and usually interfere with ease of understanding.	Shows only limited control of a few simple memorised grammatical structures and sentence patterns.	Limited vocabulary range consisting only of isolated words and memorised phrases.	Can produce very short, isolated, memorised utterances with frequent pausing and a distracting use of fillers to search for expressions and to	Comprehension is limited to isolated, memorised phrases when they are carefully and slowly articulated.	Response time is slow, and often inappropriate. Interaction is limited to simple routine exchanges.

Level	**Pronunciation** *Uses a dialect and/or accent intelligible to the aeronautical community*	**Structure** *Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task*	**Vocabulary**	**Fluency**	**Comprehension**	**Interactions**
				articulate less familiar words.		
Pre-elementary 1	Performs at a level below the elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.	Performs at a level below the Elementary level.

APPENDIX 2 - BASIC TRAINING

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

(a) Basic training shall cover the following knowledge requirements:

(1) Air law

(2) rules and regulations relevant to the air traffic controller;

(3) Air traffic control equipment

(4) principles, use and limitations of equipment used in air traffic control;

(5) principles of flight; principles of operation and functioning of aircraft and RPAS, engines and systems; aircraft performance relevant to air traffic control operations;

(6) Human performance including principles of TEM and the impact of psychoactive substances on human performance;

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

(7) Meteorology: aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

(8) Navigation principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids; and

(9) 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 1: INTRODUCTION TO THE COURSE

SUBJECT 2: AVIATION LAW

SUBJECT 3: AIR TRAFFIC MANAGEMENT

SUBJECT 4: METEOROLOGY

SUBJECT 5: NAVIGATION

SUBJECT 6: AIRCRAFT

SUBJECT 7: HUMAN FACTORS

SUBJECT 8: EQUIPMENT AND SYSTEMS

SUBJECT 9: PROFESSIONAL ENVIRONMENT

SUBJECT 1: INTRODUCTION TO THE COURSE

TOPIC INTRB 1 — COURSE MANAGEMENT

Subtopic INTRB 1.1 — Course introduction

Subtopic INTRB 1.2 — Course administration

Subtopic INTRB 1.3 — Study material and training documentation

TOPIC INTRB 2 — INTRODUCTION TO THE ATC TRAINING COURSE

Subtopic INTRB 2.1 — Course content and organisation

Subtopic INTRB 2.2 — Training ethos

Subtopic INTRB 2.3 — Assessment process

TOPIC INTRB 3 — INTRODUCTION TO THE ATCO'S FUTURE

Subtopic INTRB 3.1 — Job prospect

SUBJECT 2: AVIATION LAW

TOPIC LAWB 1 — INTRODUCTION TO AVIATION LAW

Subtopic LAWB 1.1 — Relevance of aviation law

TOPIC LAWB 2 — INTERNATIONAL ORGANISATIONS

Subtopic LAWB 2.1 — ICAO

Subtopic LAWB 2.2 — reserved

Subtopic LAWB 2.3 — Aviation associations

TOPIC LAWB 3 — NATIONAL ORGANISATIONS

Subtopic LAWB 3.1 — Purpose and function

Subtopic LAWB 3.2 — National legislative procedures

Subtopic LAWB 3.3 — Competent authority

Subtopic LAWB 3.4 — reserved

TOPIC LAWB 4 — ATS SAFETY MANAGEMENT

Subtopic LAWB 4.1 — Safety regulation

Subtopic LAWB 4.2 — Safety management system

TOPIC LAWB 5 — RULES AND REGULATIONS

Subtopic LAWB 5.1 — Units of measurement

Subtopic LAWB 5.2 — ATCO licensing/certification

Subtopic LAWB 5.3 — Overview of ANS and ATS

Subtopic LAWB 5.4 — Rules of the air

Subtopic LAWB 5.5 — Airspace and ATS routes

Subtopic LAWB 5.6 — Flight plan

Subtopic LAWB 5.7 — Aerodromes

Subtopic LAWB 5.8 — Holding procedures for IFR flights

Subtopic LAWB 5.9 — Holding procedures for VFR flights

SUBJECT 3: AIR TRAFFIC MANAGEMENT

TOPIC ATMB 1 — AIR TRAFFIC MANAGEMENT

Subtopic ATMB 1.1 — Application of units of measurement

Subtopic ATMB 1.2 — Air traffic control (ATC) service

Subtopic ATMB 1.3 — Flight information service (FIS)

Subtopic ATMB 1.4 — Alerting service

Subtopic ATMB 1.5 — Air traffic advisory service

Subtopic ATMB 1.6 — ATS system capacity and air traffic flow management

Subtopic ATMB 1.7 — Airspace management (ASM)

TOPIC ATMB 2 — ALTIMETRY AND LEVEL ALLOCATION

Subtopic ATMB 2.1 — Altimetry

Subtopic ATMB 2.2 — Transition level

Subtopic ATMB 2.3 — Level allocation

TOPIC ATMB 3 — RADIOTELEPHONY (RTF)

Subtopic ATMB 3.1 — RTF general operating procedures

TOPIC ATMB 4 — ATC CLEARANCES AND ATC INSTRUCTIONS

Subtopic ATMB 4.1 — Type and content of ATC clearances

Subtopic ATMB 4.2 — ATC instructions

TOPIC ATMB 5 — COORDINATION

Subtopic ATMB 5.1 — Principles, types and content of coordination

Subtopic ATMB 5.2 — Necessity for coordination

Subtopic ATMB 5.3 — Means of coordination

TOPIC ATMB 6 — DATA DISPLAY

Subtopic ATMB 6.1 — Data extraction

Subtopic ATMB 6.2 — Data management

TOPIC ATMB 7 — SEPARATIONS

Subtopic ATMB 7.1 — Vertical separation and procedures

Subtopic ATMB 7.2 — Horizontal separation and procedures

Subtopic ATMB 7.3 — Visual separation

Subtopic ATMB 7.4 — Aerodrome separation and procedures

Subtopic ATMB 7.5 — Separation based on ATS surveillance systems

Subtopic ATMB 7.6 — Wake turbulence separation

TOPIC ATMB 8 — AIRBORNE COLLISION AVOIDANCE SYSTEMS AND GROUND-BASED SAFETY NETS

Subtopic ATMB 8.1 — Airborne collision avoidance systems

Subtopic ATMB 8.2 — Ground-based safety nets

TOPIC ATMB 9 — BASIC PRACTICAL SKILLS

Subtopic ATMB 9.1 — Traffic management process

Subtopic ATMB 9.2 — Basic practical skills applicable to all ratings

Subtopic ATMB 9.3 — Basic practical skills applicable to aerodrome

Subtopic ATMB 9.4 — Basic practical skills applicable to surveillance

SUBJECT 4: METEOROLOGY

TOPIC METB 1 — INTRODUCTION TO METEOROLOGY

Subtopic METB 1.1 — Application of units of measurement

Subtopic METB 1.2 — Aviation and meteorology

Subtopic METB 1.3 — Organisation of meteorological service

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Subtopic METB 2.1 — Composition and structure

Subtopic METB 2.2 — Standard atmosphere

Subtopic METB 2.3 — Heat and temperature

Subtopic METB 2.4 — Water in the atmosphere

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TOPIC METB 3 — ATMOSPHERIC CIRCULATION

Subtopic METB 3.1 — General air circulation

Subtopic METB 3.2 — Air masses and frontal systems

Subtopic METB 3.3 — Mesoscale systems

Subtopic METB 3.4 — Wind

TOPIC METB 4 — METEOROLOGICAL PHENOMENA

Subtopic METB 4.1 — Clouds

Subtopic METB 4.2 — Types of precipitation

Subtopic METB 4.3 — Visibility

Subtopic METB 4.4 — Meteorological hazards

TOPIC METB 5 — METEOROLOGICAL INFORMATION FOR AVIATION

Subtopic METB 5.1 — Messages and reports

SUBJECT 5: NAVIGATION

TOPIC NAVB 1 — INTRODUCTION TO NAVIGATION

Subtopic NAVB 1.1 — Application of units of measurement

Subtopic NAVB 1.2 — Purpose and use of navigation

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Subtopic NAVB 2.2 — System of coordinates, direction and distance

Subtopic NAVB 2.3 — Magnetism

TOPIC NAVB 3 — MAPS AND AERONAUTICAL CHARTS

Subtopic NAVB 3.1 — Map making and projections

Subtopic NAVB 3.2 — Maps and charts used in aviation

TOPIC NAVB 4 — NAVIGATIONAL BASICS

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Subtopic NAVB 4.2 — Speed

Subtopic NAVB 4.3 — Visual navigation

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Subtopic NAVB 5.1 — Ground-based systems

Subtopic NAVB 5.2 — Inertial navigation systems

Subtopic NAVB 5.3 — Satellite-based systems

Subtopic NAVB 5.4 — Instrument approach procedures

TOPIC NAVB 6 — PERFORMANCE BASED NAVIGATION

Subtopic NAVB 6.1 — Principles and benefits of area navigation

Subtopic NAVB 6.2 — Introduction to PBN

Subtopic NAVB 6.3 — PBN applications

TOPIC NAVB 7 — DEVELOPMENTS IN NAVIGATION

Subtopic NAVB 7.1 — Future developments

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Subtopic ACFTB 1.2 — Aviation and aircraft

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Subtopic ACFTB 2.2 — Structural components and control of an aircraft

Subtopic ACFTB 2.3 — Flight envelope

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Subtopic ACFTB 3.4 — Environmental categories

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Subtopic ACFTB 4.1 — Recognition

Subtopic ACFTB 4.2 — Performance data

TOPIC ACFTB 5 — AIRCRAFT ENGINES

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Subtopic ACFTB 5.2 — Jet engines

Subtopic ACFTB 5.3 — Turboprop engines

Subtopic ACFTB 5.4 — Aviation fuels

TOPIC ACFTB 6 — AIRCRAFT SYSTEMS AND INSTRUMENTS

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Subtopic ACFTB 6.2 — Navigational instruments

Subtopic ACFTB 6.3 — Engine instruments

Subtopic ACFTB 6.4 — Aircraft systems

TOPIC ACFTB 7 — FACTORS AFFECTING AIRCRAFT PERFORMANCE

Subtopic ACFTB 7.1 — Take-off factors

Subtopic ACFTB 7.2 — Climb factors

Subtopic ACFTB 7.3 — Cruise factors

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 1.1 — Learning techniques

Subtopic HUMB 1.2 — Relevance of human factors for ATC

Subtopic HUMB 1.3 — Human factors and ATC

TOPIC HUMB 2 — HUMAN PERFORMANCE

Subtopic HUMB 2.1 — Individual behaviour

Subtopic HUMB 2.2 — Safety culture and professional conduct

Subtopic HUMB 2.3 — Health and well-being

Subtopic HUMB 2.4 — Teamwork

Subtopic HUMB 2.5 — Basic needs of people at work

Subtopic HUMB 2.6 — Stress

TOPIC HUMB 3 — HUMAN ERROR

Subtopic HUMB 3.1 — Dangers of error

Subtopic HUMB 3.2 — Definition of human error

Subtopic HUMB 3.3 — Classification of human error

Subtopic HUMB 3.4 — Risk analysis and risk management

TOPIC HUMB 4 — COMMUNICATION

Subtopic HUMB 4.1 — Importance of good communications in ATC

Subtopic HUMB 4.2 — Communication process

Subtopic HUMB 4.3 — Communication modes

TOPIC HUMB 5 — THE WORK ENVIRONMENT

Subtopic HUMB 5.1 — Ergonomics and the need for good design

Subtopic HUMB 5.2 — Equipment and tools

Subtopic HUMB 5.3 — Automation

SUBJECT 8: EQUIPMENT AND SYSTEMS

TOPIC EQPSB 1 — ATC EQUIPMENT

Subtopic EQPSB 1.1 — Main types of ATC equipment

TOPIC EQPSB 2 — RADIO

Subtopic EQPSB 2.1 — Radio theory

Subtopic EQPSB 2.2 — Direction finding

TOPIC EQPSB 3 — COMMUNICATION EQUIPMENT

Subtopic EQPSB 3.1 — Radio communications

Subtopic EQPSB 3.2 — Voice communication between ATS units/positions

Subtopic EQPSB 3.3 — Data link communications

Subtopic EQPSB 3.4 — Airline communications

TOPIC EQPSB 4 — INTRODUCTION TO SURVEILLANCE

Subtopic EQPSB 4.1 — Surveillance concept in ATS

TOPIC EQPSB 5 — RADAR

Subtopic EQPSB 5.1 — Principles of radar

Subtopic EQPSB 5.2 — Primary radar

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Subtopic EQPSB 5.4 — Use of radars

Subtopic EQPSB 5.5 — Mode S

TOPIC EQPSB 6 — AUTOMATIC DEPENDENT SURVEILLANCE

Subtopic EQPSB 6.1 — Principles of automatic dependent

Subtopic EQPSB 6.1 — Principles of automatic dependent surveillance

Subtopic EQPSB 6.2 — Use of automatic dependent surveillance

TOPIC EQPSB 7 — MULTILATERATION

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Subtopic EQPSB 7.2 — Use of multilateration

TOPIC EQPSB 8 — SURVEILLANCE DATA PROCESSING

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TOPIC EQPSB 9 — FUTURE EQUIPMENT

Subtopic EQPSB 9.1 — New developments

TOPIC EQPSB 10 — AUTOMATION IN ATS

Subtopic EQPSB 10.1 — Principles of automation

Subtopic EQPSB 10.2 — Aeronautical fixed telecommunication network (AFTN)

Subtopic EQPSB 10.3 — On-line data interchange

Subtopic EQPSB 10.4 — Systems used for the automatic dissemination of information

TOPIC EQPSB 11 — WORKING POSITIONS

Subtopic EQPSB 11.1 — Working position equipment

Subtopic EQPSB 11.2 — Aerodrome control

Subtopic EQPSB 11.3 — Approach control

Subtopic EQPSB 11.4 — Area control

SUBJECT 9: PROFESSIONAL ENVIRONMENT

TOPIC PENB 1 — FAMILIARISATION

Subtopic PENB 1.1 — ATS and aerodrome facilities

TOPIC PENB 2 — AIRSPACE USERS

Subtopic PENB 2.1 — Civil aviation Subtopic PENB 2.2 — Military

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 — Environmental protection

APPENDIX 3 – AERODROME CONTROL RATING

(Reference: Part ATCO Subpart C, Section 2, ATCO.C.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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SUBJECT 5: NAVIGATION

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SUBJECT 7: HUMAN FACTORS

SUBJECT 8: EQUIPMENT AND SYSTEMS

SUBJECT 9: PROFESSIONAL ENVIRONMENT

SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS

SUBJECT 11: AERODROMES

SUBJECT 1: INTRODUCTION TO THE COURSE

TOPIC INTR 1 — COURSE MANAGEMENT

Subtopic INTR 1.1 — Course introduction

Subtopic INTR 1.2 — Course administration

Subtopic INTR 1.3 — Study material and training documentation

TOPIC INTR 2 — INTRODUCTION TO THE ATC TRAINING COURSE

Subtopic INTR 2.1 — Course content and organisation

Subtopic INTR 2.2 — Training ethos

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

Subtopic LAW 3.2 — Safety Investigation

SUBJECT 3: AIR TRAFFIC MANAGEMENT

TOPIC ATM 1 — PROVISION OF SERVICES

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

Subtopic ATM 3.2 — ATC instructions

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

TOPIC ATM 5 — ALTIMETRY AND LEVEL ALLOCATION

Subtopic ATM 5.1 — Altimetry

TOPIC ATM 6 — SEPARATIONS

Subtopic ATM 6.1 — Separation between departing aircraft

Subtopic ATM 6.2 — Separation of landing aircraft and preceding landing or departing aircraft

Subtopic ATM 6.3 — Time based wake turbulence longitudinal separation

Subtopic ATM 6.4 — Reduced separation minima

TOPIC ATM 7 — AIRBORNE COLLISION AVOIDANCE SYSTEMS AND GROUND-BASED SAFETY NETS

Subtopic ATM 7.1 — Airborne collision avoidance systems

Subtopic ATM 7.2 — Ground-based safety nets

TOPIC ATM 8 — DATA DISPLAY

Subtopic ATM 8.1 — Data management

TOPIC ATM 9 — OPERATIONAL ENVIRONMENT (SIMULATED)

Subtopic ATM 9.1 — Integrity of the operational environment

Subtopic ATM 9.2 — Verification of the currency of operational procedures

Subtopic ATM 9.3 — Handover-takeover

TOPIC ATM 10 — PROVISION OF AN AERODROME CONTROL SERVICE

Subtopic ATM 10.1 — Responsibility for the provision

Subtopic ATM 10.2 — Functions of aerodrome control tower

Subtopic ATM 10.3 — Traffic management process

Subtopic ATM 10.4 — Aeronautical ground lights

Subtopic ATM 10.5 — Information to aircraft by aerodrome control tower

Subtopic ATM 10.6 — Control of aerodrome traffic

Subtopic ATM 10.7 — Control of traffic in the traffic circuit

Subtopic ATM 10.8 — Runway in use

SUBJECT 4: METEOROLOGY

TOPIC MET 1 — METEOROLOGICAL PHENOMENA

Subtopic MET 1.1 — Meteorological phenomena

TOPIC MET 2 — SOURCES OF METEOROLOGICAL DATA

Subtopic MET 2.1 — Meteorological instruments

Subtopic MET 2.2 — Other sources of meteorological data

SUBJECT 5: NAVIGATION

TOPIC NAV 1 — MAPS AND AERONAUTICAL CHARTS

Subtopic NAV 1.1 — Maps and charts

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

Subtopic ACFT 3.1 — Take-off factors

Subtopic ACFT 3.2 — Climb factors

Subtopic ACFT 3.3 — Final approach and landing factors

Subtopic ACFT 3.4 — Economic factors

Subtopic ACFT 3.5 — Environmental factors

TOPIC ACFT 4 — AIRCRAFT DATA

Subtopic ACFT 4.1 — Recognition of aircraft types

Subtopic ACFT 4.2 — Performance data

SUBJECT 7: HUMAN FACTORS

TOPIC HUM 1 — PSYCHOLOGICAL FACTORS

Subtopic HUM 1.1 — Cognitive

TOPIC HUM 2 — MEDICAL AND PHYSIOLOGICAL FACTORS

Subtopic HUM 2.1 — Fatigue

Subtopic HUM 2.2 — Fitness

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 behavior

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

Subtopic HUM 5.2 — Violation of rules

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

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

TOPIC EQPS 3 — CONTROLLER WORKING POSITION

Subtopic EQPS 3.1 — Operation and monitoring of equipment

Subtopic EQPS 3.2 — Situation displays and information systems

Subtopic EQPS 3.3 — Flight data systems

TOPIC EQPS 4 — FUTURE EQUIPMENT

Subtopic EQPS 4.1 — New developments

TOPIC EQPS 5 — EQUIPMENT AND SYSTEMS LIMITATIONS AND DEGRADATION

Subtopic EQPS 5.1 — Reaction to limitations

Subtopic EQPS 5.2 — Communication equipment degradation

Subtopic EQPS 5.3 — Navigational equipment degradation

SUBJECT 9: PROFESSIONAL ENVIRONMENT

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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

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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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Subtopic AGA 2.3 — Runways

TOPIC AGA 3 — OBSTACLES

Subtopic AGA 3.1 — Obstacle-free airspace around aerodromes

TOPIC AGA 4 — MISCELLANEOUS EQUIPMENT

Subtopic AGA 4.1 — Location

APPENDIX 4 – APPROACH CONTROL PROCEDURAL RATING (APP)

(Reference: Annex I — Part ATCO Subpart C, Section 2, ATCO.C.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 1.1 — Course introduction

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TOPIC INTR 2 — INTRODUCTION TO THE ATC TRAINING COURSE

Subtopic INTR 2.1 — Course content and organisation

Subtopic INTR 2.2 — Training ethos

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

Subtopic LAW 3.2 — Safety Investigation

SUBJECT 3: AIR TRAFFIC MANAGEMENT

TOPIC ATM 1 — PROVISION OF SERVICES

Subtopic ATM 1.1 — Air traffic control (ATC) 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

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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

TOPIC ATM 5 — ALTIMETRY AND LEVEL ALLOCATION

Subtopic ATM 5.1 — Altimetry

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TOPIC ATM 6 — SEPARATIONS

Subtopic ATM 6.1 — Vertical separation

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Subtopic ATM 6.3 — delegation of separation

TOPIC ATM 7 — AIRBORNE COLLISION AVOIDANCE SYSTEMS AND GROUND-BASED SAFETY NETS

Subtopic ATM 7.1 — Airborne collision avoidance systems

TOPIC ATM 8 — DATA DISPLAY

Subtopic ATM 8.1 — Data management

TOPIC ATM 9 — OPERATIONAL ENVIRONMENT (SIMULATED)

Subtopic ATM 9.1 — Integrity of the operational environment

Subtopic ATM 9.2 — Verification of the currency of operational procedures

Subtopic ATM 9.3 — Handover-takeover

TOPIC ATM 10 — PROVISION OF CONTROL SERVICE

Subtopic ATM 10.1 — Responsibility and processing of information

Subtopic ATM 10.2 — Approach control

Subtopic ATM 10.3 — Traffic management process

Subtopic ATM 10.4 — Handling traffic

SUBJECT 4: METEOROLOGY

TOPIC MET 1 — METEOROLOGICAL PHENOMENA

Subtopic MET 1.1 — Meteorological phenomena

TOPIC MET 2 — SOURCES OF METEOROLOGICAL DATA

Subtopic MET 2.1 — Sources of meteorological information

SUBJECT 5: NAVIGATION

TOPIC NAV 1 — MAPS AND AERONAUTICAL CHARTS

Subtopic NAV 1.1 — Maps and charts

TOPIC NAV 2 — INSTRUMENT NAVIGATION

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Subtopic NAV 2.2 — Stabilised approach

Subtopic NAV 2.3 — Instrument departures and arrivals

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Subtopic NAV 2.5 — Satellite-based systems

Subtopic NAV 2.6 — PBN applications

SUBJECT 6: AIRCRAFT

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TOPIC HUM 3 — SOCIAL AND ORGANISATIONAL FACTORS

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Subtopic HUM 3.2 — Teamwork and team roles

Subtopic HUM 3.3 — Responsible behavior

TOPIC HUM 4 — STRESS

Subtopic HUM 4.1 — Stress

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TOPIC HUM 5 — HUMAN ERROR

Subtopic HUM 5.1 — Human error

Subtopic HUM 5.2 — Violation of rules

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

TOPIC EQPS 1 — VOICE COMMUNICATIONS

Subtopic EQPS 1.1 — Radio communications

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

TOPIC EQPS 3 — CONTROLLER WORKING POSITION

Subtopic EQPS 3.1 — Operation and monitoring of equipment

Subtopic EQPS 3.2 — Situation displays and information systems

Subtopic EQPS 3.3 — Flight data systems

TOPIC EQPS 4 — FUTURE EQUIPMENT

Subtopic EQPS 4.1 — New developments

TOPIC EQPS 5 — EQUIPMENT AND SYSTEMS LIMITATIONS AND DEGRADATION

Subtopic EQPS 5.1 — Reaction to limitations

Subtopic EQPS 5.2 — Communication equipment degradation

Subtopic EQPS 5.3 — Navigational equipment degradation

SUBJECT 9: PROFESSIONAL ENVIRONMENT

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Subtopic PEN 1.1 — Study visit to approach control unit

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 — Diversions

SUBJECT 11: AERODROMES

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Subtopic AGA 1.1 — Definitions

Subtopic AGA 1.2 — Coordination

TOPIC AGA 2 — MOVEMENT AREA

Subtopic AGA 2.1 — Movement area

Subtopic AGA 2.2 — Manoeuvring area

Subtopic AGA 2.3 — Runways

TOPIC AGA 3 — OBSTACLES

Subtopic AGA 3.1 — Obstacle-free airspace around aerodromes

TOPIC AGA 4 — MISCELLANEOUS EQUIPMENT

Subtopic AGA 4.1 — Location

APPENDIX 5 – AREA CONTROL PROCEDURAL RATING (ACP)

(Reference: Part ATCO Subpart C, Section 2, ATCO.C.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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SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS

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Subtopic INTR 1.1 — Course introduction

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Subtopic INTR 1.3 — Study material and training documentation

TOPIC INTR 2 — INTRODUCTION TO THE ATC TRAINING COURSE

Subtopic INTR 2.1 — Course content and organisation

Subtopic INTR 2.2 — Training ethos

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

Subtopic LAW 3.2 — Safety Investigation

SUBJECT 3: AIR TRAFFIC MANAGEMENT

TOPIC ATM 1 — PROVISION OF SERVICES

Subtopic ATM 1.1 — Air traffic control (ATC) 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

Subtopic ATM 1.5 — Airspace management (ASM)

TOPIC ATM 2 — COMMUNICATION

Subtopic ATM 2.1 — Effective communication

TOPIC ATM 3 — ATC CLEARANCES AND ATC INSTRUCTIONS

Subtopic ATM 3.1 — ATC clearances

Subtopic ATM 3.2 — ATC instructions

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

TOPIC ATM 5 — ALTIMETRY AND LEVEL ALLOCATION

Subtopic ATM 5.1 — Altimetry

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Subtopic ATM 6.1 — Vertical separation

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Subtopic ATM 8.1 — Data management

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Subtopic ATM 9.1 — Integrity of the operational environment

Subtopic ATM 9.2 — Verification of the currency of operational procedures

Subtopic ATM 9.3 — Handover-takeover

TOPIC ATM 10 — PROVISION OF CONTROL SERVICE

Subtopic ATM 10.1 — Responsibility and processing of information

Subtopic ATM 10.2 — Area control

Subtopic ATM 10.3 — Traffic management process

Subtopic ATM 10.4 — Handling traffic

TOPIC ATM 11 — HOLDING

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Subtopic ATM 11.2 — Holding aircraft

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TOPIC NAV 2 — INSTRUMENT NAVIGATION

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Subtopic NAV 2.2 — Navigational assistance

Subtopic NAV 2.3 — PBN applications

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Subtopic ACFT 1.1 — Aircraft instruments

TOPIC ACFT 2 — AIRCRAFT CATEGORIES

Subtopic ACFT 2.1 — Wake turbulence

TOPIC ACFT 3 — FACTORS AFFECTING AIRCRAFT PERFORMANCE

Subtopic ACFT 3.1 — Climb factors

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Subtopic ACFT 3.3 — Descent factor

Subtopic ACFT 3.4 — Economic factors

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Subtopic HUM 1.1 — Cognitive

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Subtopic HUM 2.2 — Fitness

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 behavior

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

Subtopic HUM 5.2 — Violation of rules

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

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Subtopic EQPS 1.1 — Radio communications

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

TOPIC EQPS 3 — CONTROLLER WORKING POSITION

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Subtopic EQPS 3.2 — Situation displays and information systems

Subtopic EQPS 3.3 — Flight data systems

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TOPIC EQPS 5 — EQUIPMENT AND SYSTEMS LIMITATIONS AND DEGRADATION

Subtopic EQPS 5.1 — Reaction to limitations

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Subtopic EQPS 5.3 — Navigational equipment degradation

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Subtopic PEN 1.1 — Study visit to approach control centre

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 — Diversions

APPENDIX 6 – APPROACH CONTROL SURVEILLANCE RATING (APS)

(Reference: Part ATCO Subpart C, Section 2, ATCO.C.010(a)(2)(v))

(a) Approach Control Surveillance Rating — APS shall cover the following knowledge requirements:

(1) 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:

(2) principles, use and limitations of applicable ATS surveillance systems and associated equipment; and

(3) procedures for the provision of ATS surveillance service, as appropriate, including procedures to ensure appropriate terrain clearance.

(b) The approach control surveillance rating training shall comprise of the following subjects, topics and subtopics;

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Subtopic INTR 1.3 — Study material and training documentation

TOPIC INTR 2 — INTRODUCTION TO THE ATC TRAINING COURSE

Subtopic INTR 2.1 — Course content and organisation

Subtopic INTR 2.2 — Training ethos

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

Subtopic LAW 3.2 — Safety Investigation

SUBJECT 3: AIR TRAFFIC MANAGEMENT

TOPIC ATM 1 — PROVISION OF SERVICES

Subtopic ATM 1.1 — Air traffic control (ATC) 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

Subtopic ATM 1.5 — Airspace management (ASM)

TOPIC ATM 2 — COMMUNICATION

Subtopic ATM 2.1 — Effective communication

TOPIC ATM 3 — ATC CLEARANCES AND ATC INSTRUCTIONS

Subtopic ATM 3.1 — ATC clearances

Subtopic ATM 3.2 — ATC instructions

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

TOPIC ATM 5 — ALTIMETRY AND LEVEL ALLOCATION

Subtopic ATM 5.1 — Altimetry

Subtopic ATM 5.2 — Terrain clearance

TOPIC ATM 6 — SEPARATIONS

Subtopic ATM 6.1 — Vertical separation

Subtopic ATM 6.2 — Longitudinal separation in a surveillance environment

Subtopic ATM 6.3 — delegation of separation

Subtopic ATM 6.4 — Wake turbulence distance-based separation

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TOPIC ATM 7 — AIRBORNE COLLISION AVOIDANCE SYSTEMS AND GROUND-BASED SAFETY NETS

Subtopic ATM 7.1 — Airborne collision avoidance systems

Subtopic ATM 7.2 — Ground base safety nets

TOPIC ATM 8 — DATA DISPLAY

Subtopic ATM 8.1 — Data management

TOPIC ATM 9 — OPERATIONAL ENVIRONMENT (SIMULATED)

Subtopic ATM 9.1 — Integrity of the operational environment

Subtopic ATM 9.2 — Verification of the currency of operational procedures

Subtopic ATM 9.3 — Handover-takeover

TOPIC ATM 10 — PROVISION OF CONTROL SERVICE

Subtopic ATM 10.1 — Responsibility and processing of information

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Subtopic ATM 10.3 — Traffic management process

Subtopic ATM 10.4 — Handling traffic

Subtopic ATM 10.5 — Control service with advanced system support

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TOPIC MET 2 — SOURCES OF METEOROLOGICAL DATA

Subtopic MET 2.1 — Sources of meteorological information

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TOPIC ACFT 3 — FACTORS AFFECTING AIRCRAFT PERFORMANCE

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Subtopic ACFT 3.2 — Cruise factors

Subtopic ACFT 3.3 — Descent and initial approach factors

Subtopic ACFT 3.4 — Final approach and landing factors

Subtopic ACFT 3.5 — Economic factors

Subtopic ACFT 3.6 — Environmental factors

TOPIC ACFT 4 — AIRCRAFT DATA

Subtopic ACFT 4.1 — Performance data

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Subtopic HUM 1.1 — Cognitive

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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 behavior

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

Subtopic HUM 5.2 — Violation of rules

TOPIC HUM 6 — COLLABORATIVE WORK

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Subtopic HUM 6.4 — Controller/pilot cooperation

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TOPIC EQPS 3 — CONTROLLER WORKING POSITION

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Subtopic EQPS 3.4 — Use of ATS surveillance system

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TOPIC EQPS 5 — EQUIPMENT AND SYSTEMS LIMITATIONS AND DEGRADATION

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Subtopic PEN 1.1 — Study visit to approach control unit

TOPIC PEN 2 — AIRSPACE USERS

Subtopic PEN 2.1 — Contributors to civil ATS operations

Subtopic PEN 2.2 — Contributors to military ATS operations

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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

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Subtopic AGA 3.1 — Obstacle-free airspace around aerodromes

TOPIC AGA 4 — MISCELLANEOUS EQUIPMENT

Subtopic AGA 4.1 — Location

APPENDIX 7 – AREA CONTROL SURVEILLANCE RATING (ACS)

(Reference:— Part ATCO Subpart C, Section 2, ATCO.C.010(a)(2)(vi))

(c) Area Control Surveillance Rating — ACS shall cover the following knowledge requirements:

(1) 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:

(2) principles, use and limitations of applicable ATS surveillance systems and associated equipment; and

(3) procedures for the provision of ATS surveillance service, as appropriate, including procedures to ensure appropriate terrain clearance.

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

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Subtopic INTR 2.2 — Training ethos

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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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)

Subtopic ATM 1.3 — Alerting service (ALRS)

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

Subtopic ATM 1.5 — Airspace management (ASM)

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

TOPIC ATM 5 — ALTIMETRY AND LEVEL ALLOCATION

Subtopic ATM 5.1 — Altimetry

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TOPIC ATM 6 — SEPARATIONS

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Subtopic ATM 6.3 — Wake turbulence distance-based separation

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Subtopic HUM 4.2 — Stress management

TOPIC HUM 5 — HUMAN ERROR

Subtopic HUM 5.1 — Human error

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Subtopic PEN 1.1 — Study visit to area control centre

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Subtopic PEN 2.1 — Contributors to civil ATS operations

Subtopic PEN 2.2 — Contributors to military ATS operations

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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

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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 — Diversions

Subtopic ABES 3.6 — Transponder failure

APPENDIX 8 – 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 9 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 9 – EXPERIENCE REQUIREMENTS – AIR TRAFFIC CONTROLLER RATINGS

(a) The applicant shall have:

(1) Satisfactorily completed approved course;

(2) The required experience for air traffic control ratings as per CAR-ATS ATS.TCR.350 "Minimum Experience Requirements (MER)".

APPENDIX 10 – SKILL REQUIREMENTS – AIR TRAFFIC CONTROLLER RATINGS

(a) 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.