



## **CAR-ATCO**

# **AIR TRAFFIC CONTROLLER LICENSING AND ATC TRAINING ORGANIZATIONS**

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## RECORD OF ISSUES AND APPLICABILITY

Issue	Date of Issue	Changes	Date of Applicability
Issue 01	February 14 <sup>th</sup> , 2022	Initial issue based on NPA 2021-01 and associated CRD	January 01 <sup>st</sup> , 2023
Issue 01 (CORRECTED)	June 13 <sup>th</sup> , 2022	Typo and numbering fixed	January 01 <sup>st</sup> , 2023

## PART ATCO - REQUIREMENTS FOR THE LICENSING OF AIR TRAFFIC CONTROLLERS

### SUBPART A – GENERAL REQUIREMENTS

#### ATCO.A.001 Scope

This Part establishes the requirements for the issue, revocation and suspension of student air traffic controller licences and air traffic controller licences, their associated ratings and endorsements, and the conditions of their validity and use.

#### GM1 ATCO.A.001 Scope

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

For the purpose of this regulation, the competent authority shall be the (GCAA) General Civil Aviation Authority.

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

An application for the issue of licences, ratings and endorsements shall be submitted to the competent authority in accordance with the established procedures.

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 General Civil Aviation Authority.

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.

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

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 elicensing services for the corresponding request.

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

##### Electronic Licence

Any application when duly approved by the GCAA 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.

The licence will bear all the required details in compliance with the GCAA 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.

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 GCAA 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 GCAA 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**

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**

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**

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 GCAA upon completion of other requirements as stated in this part.

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

The GCAA 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 air navigation service provider of the provisional inability to exercise the privileges of their licence.
- (c) Air navigation service providers may declare the provisional inability of the licence holder if they become aware of any doubt concerning the ability of the licence holder to safely exercise the privileges of the licence.
- (d) Air navigation service providers shall develop and implement objective, transparent and non-discriminatory procedures to enable licence holders declaring provisional inability to exercise the privileges of their licence in

accordance with point (b), to declare the provisional inability of the licence holder in accordance with point (c), to manage the operational impact of provisional inability cases and to inform the 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**

##### **GROUND FOR PROVISIONAL INABILITY**

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

- (a) under the influence of psychoactive substances;
- (b) unfit to perform the duties due to injury, fatigue, sickness, stress, including critical incident stress or other similar causes;
- (c) not meeting all the competence-related requirements set out in the unit competence scheme.

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

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**

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:

- (a) the processes to declare and terminate provisional inability;
- (b) an indicative list of cases when the competent authority must be informed of the declaration or termination of the provisional inability;
- (c) the processes to inform the competent authority; and
- (d) 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 GCAA 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 – 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 GCAA in accordance with the requirements laid down in Part ATCO.OR relevant to the rating, and if applicable, to the rating endorsement, as set out in Part ATCO, Subpart D, Section 2;
  - (3) hold a valid GCAA 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 by a training organisation certified in accordance with the requirements laid down in Part ATCO.OR and certified to provide initial training relevant to the rating, as to whether he/she continues to satisfy the requirements relevant to that rating, and after satisfying any additional training requirements resulting from this assessment.
- (e) 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 should 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 should be approved by the Authority prior to commencement of OJT;
  - (2) The holder of a Student ATC licence who has not exercised the privileges of that licence for a period of 1 year. The Student ATCO may only commence or continue unit training in that rating after the APC in order to determine whether he continues to satisfy the requirements relevant to that rating, and after satisfying any training needs that result from this assessment;
  - (3) An ATC licence holder who has not exercised the privileges of a particular rating for more than 12 months but less than 4 years. The ATC licence holder may only commence unit training in that rating after the APC in order to determine whether the person concerned continues to satisfy the conditions of that rating, and after satisfying any training needs that result from this assessment; and
  - (4) For a UAE licence holder transferring to another unit when an ATC rating is required to be utilized at a different unit.



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

##### MATURITY OF AIR TRAFFIC CONTROLLERS

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

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

##### ASSESSMENT OF PREVIOUS COMPETENCE

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

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

- (a) The APC is not applicable:
  - (1) For an applicant who completed initial course and did not start the corresponding OJT.
  - (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.

#### 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, conducted by an ATO/ANSP satisfying the competency requirements and certified to provide initial training relevant to the rating, as to whether he/she continues to satisfy the requirements relevant to that rating, and after satisfying any training requirements resulting from this assessment.
- (f) An air traffic controller licence issued under this part shall remain valid for a maximum of 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**

Any person holding an Air traffic controller licence issued by the GCAA 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 Procedural (ACP) rating, indicating that the licence holder is competent to provide an area control service to aircraft without the use of surveillance equipment;
  - (5) the Area Control Surveillance (ACS) rating, indicating that the licence holder is competent to provide an area control service to aircraft with the use of surveillance equipment.
- (b) The holder of a rating who has interrupted exercising the privileges associated with that rating for a period of four or more immediately preceding consecutive years may only start unit training in that rating after assessment of previous competence, conducted by a ATO/ANSP satisfying the competency requirements and certified to provide training relevant to the rating, as to whether the person concerned continues to satisfy the conditions of that rating, and after satisfying any training requirements resulting from this assessment.

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

##### **ASSESSMENT OF PREVIOUS COMPETENCE**

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

#### **ATCO.B.015 Reserved**

#### **ATCO.B.020 Reserved**

#### **ATCO.B.025 Reserved**

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

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 authorities according to GCAA Safety Decision 2017-02.

#### **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:
    - preparation of individual assessment;
    - administration: location(s), identity check and invigilation, assessment discipline, confidentiality/security;
    - reporting and documentation provided to the competent authority and/or to the applicant, including sample certificate; and
    - retention of documents and records.
  - (8) The assessment documentation and records should be kept for a period of at least 5 years and should be made available to the 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

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) and GCAA Safety Decision 2017-02.



## SUBPART C - REQUIREMENTS FOR INSTRUCTORS AND ASSESSORS

### SECTION 1 - Instructors

#### ATCO.C.001 Theoretical instructors

- (a) Theoretical training shall only be carried out by appropriately qualified instructors.
- (b) A theoretical instructor is appropriately qualified if he/she:
  - (1) holds 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 ATCO.C.001(b)(1) Theoretical instructors

##### QUALIFICATION OF THEORETICAL INSTRUCTORS

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

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

##### INSTRUCTIONAL SKILLS FOR THEORETICAL INSTRUCTORS

A satisfactory demonstration of instructional skills for theoretical instructors should establish competence at least in the following areas:

- (a) lesson objectives are defined and communicated;
- (b) subject questions are fully answered;
- (c) visual aids are used appropriately;
- (d) language is unambiguous;
- (e) the lesson is correctly summarised; and
- (f) lesson objectives are fulfilled

#### ATCO.C.005 Practical instructors

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

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

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



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

##### **SHORTENING OF THE RATING EXPERIENCE REQUIREMENT FOR OJTI**

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

#### **GM2 ATCO.C.010 On-the-job training instructor (OJTI) privileges**

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

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

Applicants for the issue of an OJTI endorsement shall:

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

#### **GM1 ATCO.C.010 On the job instructor endorsement**

##### **SHORTENING OF THE LICENCE EXPERIENCE REQUIREMENT FOR OJTI**

When assessing the training organisations' or ANSP's request for the shortening of the licence experience requirement for OJTIs, the competent authority should take into account the complexity of the traffic in the unit where the on-the-job instruction is provided, as well as the impact on the continuity and safety aspects of the service.

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

- (a) The OJTI endorsement shall be valid for a period of three years.
- (b) The OJTI endorsement may be revalidated by successfully completing refresher training on practical instructional skills during its validity period, provided that the requirements of ATCO.C.015(a) and (b) are met.
- (c) If the OJTI endorsement has expired, it may be renewed by:
  - (1) receiving refresher training on practical instructional skills; and
  - (2) successfully passing a practical instructor competence assessment;
 within the year preceding the application for renewal, provided that the requirements of ATCO.C.015(a) and (b) are met.

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

##### **REVALIDATION**

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





## SECTION 2 - Assessors

### ATCO.C.045 Assessor privileges

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

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

#### DEMONSTRATION OF KNOWLEDGE OF CURRENT OPERATIONAL PRACTICES

The demonstration of knowledge of current operational practices may be achieved by establishing familiarity with current environment and operational procedures.

### ATCO.C.050 Vested interests

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

### ATCO.C.055 Application for assessor endorsement

Applicants for the issue of an assessor endorsement shall:

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



have successfully completed an assessor competence assessment including an assessment of previous competency checks

#### **ATCO.C.060 Validity of assessor endorsement**

(a) The assessor endorsement shall be valid for a period of three years.

The assessor endorsement may be revalidated by successfully completing refresher training on assessment skills and on current operational practices during its validity period and has been appropriately assessed

If the assessor endorsement has expired, it may be renewed by:

- (1) receiving refresher training on assessment skills and on current operational practices; and
  - (2) successfully passing an assessor competence assessment;
- within the year preceding the application for renewal and meeting ATCO.C.060 (b)

(b) 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 ATCO.C.060(b) Validity of assessor endorsement**

##### **REVALIDATION**

(a) Successful completion of the refresher training in assessment skills and current operational practices may be verified by several means, for example by:

- (1) dedicated or continuous assessment;
- (2) peer assessment; or
- (3) demonstration of the practical instructional skills.

(b) Current operational practices may be refreshed by transitional and pre-on-the-job training.

(c) The verification should be undertaken following the completion of the refresher training.

## SUBPART D - AIR TRAFFIC CONTROLLER TRAINING

### SECTION 1 – General requirements

#### ATCO.D.001 Objectives of air traffic controller training

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.D.005 Types of air traffic controller training

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

### SECTION - 2- Initial training requirements

#### ATCO.D.010 Composition of initial training

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

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

##### **GENERAL**

Please refer to the Appendix 2.

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

##### **BASIC TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES**

Please refer to the Appendix 2.

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

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

Please refer to the Appendix 3.

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

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

Please refer to the Appendix 5.

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

##### **AREA CONTROL PROCEDURAL RATING (ACP) TRAINING — SUBJECT OBJECTIVES AND TRAINING OBJECTIVES**

Please refer to the Appendix 6.

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

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

Please refer to the Appendix 7.

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

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

Please refer to the Appendix 8.

#### **GM1 ATCO.D.010 Composition of initial training**

##### **GENERAL**

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

#### **ATCO.D.015 Initial training plan**

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

- (a) the composition of the initial training course provided according to ATCO.D.010;
- (b) the structure of the initial training provided according to ATCO.D.020(b);

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

#### **ATCO.D.020 Basic and rating training courses**

- (a) Basic and rating training shall be provided as separate or integrated courses.
- (b) Basic and rating training courses or an integrated initial training course shall be developed and provided by training organisations and approved by the 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.

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

##### **CERTIFICATE OF COMPLETION OF INITIAL TRAINING**

The certificate of completion may take any form and title and may cover multiple candidates.

#### **ATCO.D.025 Basic training examinations and assessment**

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

#### **ATCO.D.030 Basic training performance objectives**

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

- (a) checking and using the working position equipment;

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

#### **ATCO.D.035 Rating training examinations and assessment**

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

#### **ATCO.D.040 Rating training performance objectives**

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

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

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

##### GENERAL

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

### SECTION 3 - Training of instructors and assessors

#### ATCO.D.090 Training of practical instructors

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

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

##### ASSESSMENT OF INSTRUCTIONAL TECHNIQUES FOR PRACTICAL INSTRUCTORS

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

- (a) regulatory impact on air traffic controller training;
- (b) human factors impact on air traffic controller training;
- (c) determination of the background and experience of the person undertaking training;
- (d) determination of the current level of ability of the person undertaking training;
- (e) conduct of a pre-session briefing;
- (f) planning and conduct of the training session;
- (g) demonstration and explanation of the tasks;
- (h) monitoring of the training session;
- (i) management of interventions correctly, including error correction;

- (j) evaluation of the performance of the person undertaking training;
- (k) debrief of the person undertaking training;
- (l) furnishing of written reports on the performance of the person undertaking training;
- (m) taking appropriate follow-up action towards resolving training problems;
- (n) techniques of pausing clocks; and
- (o) knowledge of technical facilities/environment.

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

##### **REFRESHER TRAINING IN PRACTICAL INSTRUCTIONAL SKILLS**

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

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

##### **PRACTICAL INSTRUCTOR COMPETENCE ASSESSMENT**

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

#### **GM1 ATCO.D.090 Training of practical instructors**

##### **PRACTICAL INSTRUCTIONAL TECHNIQUES COURSE FOR OJT'S**

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

#### **ATCO.D.095 Training of assessors**

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

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

##### **ASSESSOR TRAINING COURSE**

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

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





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

##### **ASSESSMENT OF ASSESSOR COMPETENCE**

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

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

##### **REFRESHER TRAINING IN ASSESSMENT SKILLS**

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

#### **GM1 ATCO.D.095(a)(3) Training of assessors**

##### **ASSESSMENT OF ASSESSOR COMPETENCE**

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

**Appendix 1 of Part ATCO - 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 for stylistic effect, e.g. to emphasise a point. Uses appropriate discourse markers and connectors spontaneously	Comprehension is consistently accurate in nearly all contexts and includes comprehension of linguistic and cultural subtleties.	Interacts with ease in nearly all situations. Is sensitive to verbal and non-verbal cues, and responds to them appropriately.
Extended 5	Pronunciation, stress, rhythm and intonation, though influenced by the first language or regional variation,	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete,	Able to speak at length with relative ease on familiar topics, but may not vary speech flow as a stylistic device.	Comprehension is accurate on common, concrete, and work-related topics and mostly accurate when the	Responses are immediate, appropriate, and informative. Manages the speaker/listener

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
	rarely interfere with ease of understanding.	attempted but with errors which sometimes interfere with meaning.	and work-related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	Can make use of appropriate discourse markers or connectors.	speaker is confronted with a linguistic or situational complication or an unexpected turn of events. Is able to comprehend a range of speech varieties (dialect and/or accent) or registers.	relationship effectively.
Operational 4	Pronunciation, stress, rhythm and intonation are influenced by the first language or regional variation but only sometimes interfere with ease of understanding.	Basic grammatical structures and sentence patterns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but	Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work-related topics. Can often paraphrase successfully when lacking vocabulary	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	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	Responses are usually immediate, appropriate, and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with



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
		rarely interfere with meaning.	in unusual or unexpected circumstances.	does not prevent effective communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.	confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	apparent misunderstandings by checking, confirming, or clarifying.

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 exchanges with reasonable ease on familiar topics and in predictable situations. Generally inadequate when dealing with an unexpected turn of events.
Elementary 2	Pronunciation, stress, rhythm and	Shows only limited control of a few	Limited vocabulary range consisting only	Can produce very short, isolated,	Comprehension is limited to isolated,	Response time is slow, and often

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
	intonation are heavily influenced by the first language or regional variation and usually interfere with ease of understanding.	simple memorised grammatical structures and sentence patterns.	of isolated words and memorised phrases.	memorised utterances with frequent pausing and a distracting use of fillers to search for expressions and to articulate less familiar words.	memorised phrases when they are carefully and slowly articulated.	inappropriate. Interaction is limited to simple routine exchanges.
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 of Part ATCO - BASIC TRAINING**

(Reference: Part ATCO Subpart D, Section 2, ATCO.D.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) General knowledge:
  - until 2 November 2022, principles of flight; principles of operation and functioning of aircraft, engines and systems; aircraft performance relevant to air traffic control operations;
  - as of 3 November 2022, principles of flight; principles of operation and functioning of aircraft and RPAS, engines and
- (6) systems; aircraft performance relevant to air traffic control operations;
- (7) 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).
- (8) Meteorology: aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;
- (9) Navigation principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids; and
- (10) 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



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

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TOPIC LAWB 4 — ATS SAFETY MANAGEMENT

Subtopic LAWB 4.1 — Safety regulation

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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

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### **Appendix 3 of Part ATCO – AERODROME CONTROL RATING**

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

(c) 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;

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

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### TOPIC LAW 3 — ATC SAFETY MANAGEMENT

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***Appendix 4 of Part ATCO - Reserved***

**Appendix 5 of Part ATCO – APPROACH CONTROL PROCEDURAL RATING (APP)**

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

- (e) 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
- (f) The approach control procedural rating training shall comprise of the following subjects, topics and subtopics:

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SUBJECT 11: AERODROMES

TOPIC AGA 1 — AERODROME DATA, LAYOUT AND COORDINATION

Subtopic AGA 1.1 — Definitions

Subtopic AGA 1.2 — Coordination

TOPIC AGA 2 — MOVEMENT AREA

Subtopic AGA 2.1 — Movement area

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 6 of Part ATCO - AREA CONTROL PROCEDURAL RATING (ACP)**

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

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

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SUBJECT 9: PROFESSIONAL ENVIRONMENT  
SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS

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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

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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

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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TOPIC ATM 6 — SEPARATIONS

Subtopic ATM 6.1 — Vertical separation

Subtopic ATM 6.2 — Horizontal 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)

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Subtopic ATM 9.2 — Verification of the currency of operational procedures

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TOPIC ATM 10 — PROVISION OF CONTROL SERVICE

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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

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

Subtopic NAV 2.1 — Navigational systems

Subtopic NAV 2.2 — Navigational assistance

Subtopic NAV 2.3 — PBN applications

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 — Climb factors

Subtopic ACFT 3.2 — Cruise factors

Subtopic ACFT 3.3 — Descent factor

Subtopic ACFT 3.4 — Economic factors



Subtopic ACFT 3.5 — Environmental factors

TOPIC ACFT 4 — AIRCRAFT DATA

Subtopic ACFT 4.1 — Performance data

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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

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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

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TOPIC PEN 1 — FAMILIARISATION

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

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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



### **Appendix 7 of Part ATCO – APPROACH CONTROL SURVEILLANCE RATING (APS)**

(Reference: PART ATCO Subpart D, Section 2, ATCO.D.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:
    - (i) principles, use and limitations of applicable ATS surveillance systems and associated equipment; and
    - (ii) 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 1.2 — 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 — 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

#### Subtopic ATM 6.5 — Separation based on ATS surveillance systems

### 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

Subtopic ATM 10.2 — ATS surveillance service

Subtopic ATM 10.3 — Traffic management process

Subtopic ATM 10.4 — Handling traffic

Subtopic ATM 10.5 — Control service with advanced system support

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

Subtopic NAV 2.1 — Navigational systems

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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 — Climb factors

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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

## SUBJECT 7: HUMAN FACTORS

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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

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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
- Subtopic EQPS 3.4 — Use of ATS surveillance system
- Subtopic EQPS 3.5 — Advanced 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
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- Subtopic EQPS 5.4 — Surveillance equipment degradation
- Subtopic EQPS 5.5 — ATC processing system 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

### TOPIC AGA 1 — AERODROME DATA, LAYOUT AND COORDINATION

Subtopic AGA 1.1 — Definitions

Subtopic AGA 1.2 — Coordination

### TOPIC AGA 2 — MOVEMENT AREA

Subtopic AGA 2.1 — Movement area

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 8 of Part ATCO AREA CONTROL SURVEILLANCE RATING (ACS)**

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

- (a) 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:
    - (i) principles, use and limitations of applicable ATS surveillance systems and associated equipment; and
    - (ii) procedures for the provision of ATS surveillance service, as appropriate, including procedures to ensure appropriate terrain clearance.
- (b) 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



## 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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### TOPIC ATM 6 — SEPARATIONS

#### Subtopic ATM 6.1 — Vertical separation

#### Subtopic ATM 6.2 — Longitudinal separation in a surveillance environment

#### Subtopic ATM 6.3 — Wake turbulence distance-based separation

#### Subtopic ATM 6.4 — Separation based on ATS surveillance systems

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#### 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 CONTROL SERVICE

Subtopic ATM 10.1 — Responsibility and processing of information

Subtopic ATM 10.2 — ATS surveillance service

Subtopic ATM 10.3 — Traffic management process

Subtopic ATM 10.4 — Handling traffic

Subtopic ATM 10.5 — Control service with advanced system support

TOPIC ATM 11 — HOLDING

Subtopic ATM 11.1 — General holding procedures

Subtopic ATM 11.2 — Holding aircraft

Subtopic ATM 11.3 — Holding in a surveillance environment

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Subtopic ATM 12.1 — Establishment of identification

Subtopic ATM 12.2 — Maintenance of identification

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Subtopic ATM 12.4 — Position Information

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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

Subtopic NAV 2.1 — Navigational systems

Subtopic NAV 2.2 — Navigational assistance



Subtopic NAV 2.3 — PBN applications

SUBJECT 6: AIRCRAFT

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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

Subtopic ACFT 3.2 — Cruise factors

Subtopic ACFT 3.3 — Descent factor

Subtopic ACFT 3.4 — Economic factors

Subtopic ACFT 3.5 — Environmental factors

TOPIC ACFT 4 — AIRCRAFT DATA

Subtopic ACFT 4.1 — Performance data

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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

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### 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

Subtopic EQPS 3.4 — Use of ATS surveillance system

Subtopic EQPS 3.5 — Advanced 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

Subtopic EQPS 5.4 — Surveillance equipment degradation

Subtopic EQPS 5.5 — ATC processing system degradation

## SUBJECT 9: PROFESSIONAL ENVIRONMENT

### TOPIC PEN 1 — FAMILIARISATION

Subtopic PEN 1.1 — Study visit to area 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

Subtopic ABES 3.6 — Transponder failure

***Appendix 9 of Part ATCO – 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 (OJT). The experience requirements specified for air traffic controller ratings in Appendix 10 of Part ATCO may be credited as part of the experience specified in this paragraph.
- (b) An air traffic controller acting as an air traffic control on-the-job training instructor shall hold an appropriate rating and be qualified as an air traffic control on-the-job training instructor.

***Appendix 10 of Part ATCO – EXPERIENCE REQUIREMENTS – AIR TRAFFIC CONTROLLER RATINGS***

The applicant shall have:

- (a) Satisfactorily completed approved course;
- (b) The required experience for air traffic control ratings as per CAR-ATS “Minimum Experience Requirements”.

***Appendix 11 of Part ATCO – SKILL REQUIREMENTS – AIR TRAFFIC CONTROLLER RATINGS***

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

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

### SUBPART A – GENERAL REQUIREMENTS

#### **ATCO.OR.A.001 Scope**

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

## SUBPART B – REQUIREMENTS FOR AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

### ATCO.OR.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

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

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

### AMC1 ATCO.OR.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 GCAA 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 of the UAE

- (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 GCAA, and
- (2) The operations and training manuals.

#### **ATCO.OR.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 ATCO.OR.B.005 Means of compliance**

##### **DEMONSTRATION OF COMPLIANCE**

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

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

- (a) Training organisations shall comply with the scope and privileges defined in the terms of approval attached to the organisation's certificate.
- (b) In order to ensure that the applicable requirements in Subpart D of Part ATCO are fulfilled, the privilege to provide unit and continuation training shall only be granted to training organisations which:
  - (1) hold a certificate for the provision of the air traffic control service; or
  - (2) have concluded a specific agreement with the ATC service provider.

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

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



#### **ATCO.OR.B.015 Changes to the training organisation**

- (a) Changes to the organisation that affect the certificate or the terms of approval of the training organisation or any relevant element of the training organisation's management systems shall require prior approval by the 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 ATCO.OR.B.015 Changes to the training organisation**

##### **GENERAL**

- (a) Training organisations should inform the competent authority of any changes to personnel specified in Part ATCO.OR that may affect the certificate or the training approval attached to it.
- (b) Training organisations should send to the 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 ATCO.OR.B.015 Changes to the training organisation**

##### **GENERAL**

- (a) Examples of changes that may affect the certificate or the terms of approval of the training organisation or the training organisation's management system are listed below:
  - (1) the name of the training organisation;
  - (2) change of legal entity;
  - (3) the training organisation's principal place of operation;
  - (4) the training organisation's type(s) of training;
  - (5) additional locations of the training organisation;
  - (6) additional courses, scope;
  - (7) addition or removal of equipment, simulator;

- (8) the accountable manager;
  - (9) any of the persons referred to in Part ATCO.OR;
  - (10) the training organisation's documentation as required by Subpart ATCO.OR.B on safety policy and procedures;
  - (11) the facilities.
- (b) Prior approval by the 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 ATCO.OR.B.015 Changes to the training organisation**

##### **CHANGE OF NAME**

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

#### **ATCO.OR.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 ATCO.OR.B.030.
- (b) Continued validity shall be subject to a successful annual compliance audit of the training organization conducted by the GCAA.
- (c) The certificate shall be returned to the competent authority without delay upon its revocation or the cease of all activities.

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

Training organisations and applicants for training organisation certificates shall grant access to any person authorised by or acting on behalf of the GCAA 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.

#### **ATCO.OR.B.030 Findings**

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

- (a) identify the root cause of the finding;
- (b) define a corrective action plan; and
- (c) demonstrate the corrective action implementation to the satisfaction of the competent authority

within the period agreed with that authority.

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

##### **CORRECTIVE ACTION PLAN AND ROOT CAUSE**

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

#### **GM2 ATCO.OR.B.030(c) Findings**

##### **COMPETENT AUTHORITY**

When reference is made to the competent authority, this means the GCAA.

#### **ATCO.OR.B.035 Immediate reaction to a safety problem**

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

## SUBPART C - MANAGEMENT OF AIR TRAFFIC CONTROLLER TRAINING ORGANISATIONS

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

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

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

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

#### SAFETY POLICY

The safety policy should:

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

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

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

##### **IDENTIFICATION OF AVIATION SAFETY HAZARDS**

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

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

##### **PERSONNEL**

A training organisation should demonstrate that:

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

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

##### **PROCESSES**

Training organisations should demonstrate that the management system:

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

- (8) course design documents;
- (9) instructor/assessor qualification, authorizations and competence records.

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

##### **COMPLIANCE MONITORING**

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

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

##### **EXAMPLE OF COMPLIANCE MONITORING SYSTEM**

- (a) Training organisations may monitor compliance with the procedures they have designed to ensure safe activities. In doing so, they may, as a minimum, and, where appropriate, monitor:
  - (1) the organisational structure;
  - (2) the plans and objectives;
  - (3) the privileges of the organisation;
  - (4) 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 ATCO.OR.C.001(f) Management system of training organisations**

**COMPLIANCE MONITORING**

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

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

- (e) inspection and audit reports.

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

##### COMPLIANCE MONITORING

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

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

##### SIZE, NATURE AND COMPLEXITY OF THE ACTIVITY

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

#### ATCO.OR.C.005 Contracted activities

- (a) Training organisations shall ensure that when contracting or purchasing any parts of their activities,



the contracted or purchased activity or part of activity conform to the applicable requirements.

- (b) When a training organisation contracts any part of its activity to an organisation that is not itself certified in accordance with this Regulation to carry out such activity, the contracted organisation shall work under the terms of approval contained in the certificate issued to the contracting training organisation and subject to audit and approval by the GCAA. 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 ATCO.OR.C.005 Contracted activities**

##### **RESPONSIBILITY WHEN CONTRACTING ACTIVITIES**

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

#### **ATCO.OR.C.010 Personnel requirements**

- (a) Training organisations shall appoint an accountable manager who has the authority for ensuring that all activities can be financed and carried out in accordance with the applicable requirements. The accountable manager shall be responsible for establishing and maintaining an effective management system.
- (b) A person 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 practical 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 practical instructors' competence and assessors' competence, in accordance with ATCO.C.045, with their relevant

endorsements.

#### **GM1 ATCO.OR.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.

#### **ATCO.OR.C.015 Facilities and equipment**

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

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

- (a) General areas  
A training organisation should have access to facilities appropriate to the size and scope of the intended operations provided in an environment conducive to learning.
- (b) Training areas  
For training organisations providing theoretical training, the facilities should also include sufficient suitably equipped classroom areas.

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

#### (a) General areas

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

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

#### (b) Training areas

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

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

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

#### SPECIFICATIONS FOR SYNTHETIC TRAINING DEVICES or SIMULATORS

#### (a) Synthetic training devices classifications

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

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

#### (b) Synthetic training device (STD) criteria

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

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

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

- (11) where a simulator is an integral part of an operational ATC system, the processes by which the training organisation is assured that interference between the simulated and operational environments is prevented.

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

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

##### **SPECIFICATIONS FOR SYNTHETIC TRAINING DEVICES or SIMULATORS**

The STD proposed for acceptance should hold an acceptance or approval from the CAA of the State of manufacture.

#### **ATCO.OR.C.020 Record keeping**

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

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

Training organisations should maintain the following records:

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

(5) instructional and/or assessment time records.

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

#### **ATCO.OR.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 ATCO.OR.C.025 Funding**

##### **SUFFICIENT FUNDING**

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

## SUBPART D - REQUIREMENTS FOR TRAINING COURSES AND TRAINING PLANS

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

Training organisations shall develop:

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

### ATCO.OR.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.