

# NETHERLANDS - MILITARY AVIATION DOCUMENT

# **NLD-MAR-APL**

# Air traffic services Personnel Licensing

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# MILITARY AVIATION AUTHORITY THE NETHERLANDS (MAA-NLD)

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# APL. 05 Subject matter and scope

- (a) This Regulation lays down detailed rules for:
  - (1) the conditions for issuing, suspending and revoking air controllers' and student air controllers' licences, associated ratings and endorsements, and the privileges and responsibilities of those holding them;
  - (2) the conditions for issuing, limiting, suspending and revoking air controllers and student air controllers' medical certificates, and the privileges and responsibilities of those holding them;
  - (3) the conditions for validating, revalidating, renewing and using such licences, ratings, endorsements and certificates.
- (b) This Regulation shall apply to:
  - student air controllers and air controllers exercising their functions within the Netherlands and/or aboard of vessels of the Netherlands Royal Navy, on behalf of the Ministry of Defence;
  - (2) persons and organisations involved in the licensing, training, testing and checking of applicants in accordance with this Regulation.

# APL.10 Compliance with requirements and procedures

- (a) The student air controllers, the air controllers and the persons involved in the licensing, training and testing of applicants referred to in APL.05 shall be qualified and licensed in accordance with the provisions of Annex 1 by the MAA-NLD.
- (b) The medical certification of the persons referred to in APL.05 shall be compliant with the technical requirements and administrative procedures laid down in the MAR-FCL3.

# **APL.15** Provision of air traffic services

Air traffic services shall only be provided by air controllers qualified and licensed in accordance with this Regulation.

# **APL.20 Definitions**

For the purposes of this Regulation, the following definitions shall apply:

- (1) abnormal situation circumstances, including degraded situations, which are neither routinely nor commonly experienced and for which an air controller has not developed automatic skills;
- (2) air control service the provision of air traffic control service , fighter control service, helicopter control service, flight information service and aeronautical station operations.
- (3) acceptable means of compliance (AMC) non-binding standards adopted by the MAA-NLD to illustrate means by which to establish compliance with this Regulation.
- (4) advisory control service a safety related service, forming part of fighter control during which the controlling unit shall provide adequate warnings of hazards

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- affecting aircraft safety. The aircraft commander is responsible for the aircraft's navigation and collision avoidance;
- (5) air traffic control service a service provided for the purpose of:
  - a. preventing collisions between aircraft, and in the manoeuvring area between aircraft and obstructions; and
  - b. expediting and maintaining an orderly flow of air traffic;
- (6) air control unit a generic term meaning variously, area control centre, fighter control centre, approach control unit, aerodrome control tower, maritime air control unit, flight information unit or aeronautical station;
- (7) alternative means of compliance an alternative to an existing AMC or a new means to establish compliance with this Regulation for which no associated AMC have been adopted by the MAA-NLD;
- (8) assessment an evaluation of the practical skills leading to the issue of the licence, rating and/or endorsement(s) and their revalidation and/or renewal, including behaviour and the practical application of knowledge and understanding being demonstrated by the person being assessed;
- (9) assessor endorsement the authorisation entered on and forming part of the licence, indicating the competence of the holder to assess the practical skills of student air controller and air controller;
- (10) close control the form of aircraft mission control, forming part of fighter control, during which the aircraft is continuously controlled, for altitude, speed and heading, to a position from which the mission can be accomplished. The controlling unit will advise the aircraft commander of the current tactical picture and will provide further advice if and when available;
- (11) control event the term control event replaces the former definition intercept, to allow greater flexibility for inclusion of fighter controller skills such as bulls eye control, tactical control, tanker joins and rear echelon asset control. Following a control event, aircraft should be separated by at least 15 nm before commencing subsequent control events;
- (12) critical incident stress the manifestation of unusual and/or extreme emotional, physical and/or behavioural reactions in an individual following an unexpected event, an accident, an incident or serious incident;
- (13) emergency situation a serious and dangerous situation requiring immediate actions;
- (14) examination a formalised test evaluating the person's knowledge and understanding;
- (15) fighter control service service provided for the purpose of identifying, tracking, and directing of aircraft for the purpose of defending an airspace, including Air to Air refuelling and tactical manoeuvring of aircraft for defensive, offensive and supporting operations;
- (16) flight information service service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights;

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- (17) guidance material (GM) non-binding material developed by the MAA-NLD that helps to illustrate the meaning of a requirement or specification and is used to support the interpretation of this Regulation and AMC;
- (18) ICAO location indicator the four-letter code group formulated in accordance with the rules prescribed by ICAO in its manual 'DOC 7910' in its latest updated version and assigned to the location of an aeronautical fixed station;
- (19) landing zone a specified zone for the landing of aircraft on land, not being a legally established aerodrome;
- (20) language proficiency endorsement the statement entered on and forming part of a licence, indicating the language proficiency of the holder;
- (21) licence a document issued and endorsed in accordance with this Regulation and entitling its lawful holder to exercise the privileges of the ratings and endorsements contained therein;
- (22) loose control a form of aircraft mission control, forming part of fighter control, during which the aircraft commander selects his own speed, altitude, heading and the appropriate tactics required to accomplish the assigned task. The controlling unit will advise the aircraft commander of the current tactical picture and will provide further advice if and when available;
- (23) maritime air control service a generic term meaning variously air traffic control service, fighter control service or flight information service provided from a ship
- (24) medical certificate a certificate, by whatever name it may be known, issued and endorsed in accordance with MAR-FCL-3 stating the result of a satisfactory medical examination;
- (25) on-the-job training instruction means the phase of unit training during which previously acquired job-related routines and skills are integrated in practice under the supervision of a qualified on- the-job training instructor in a live traffic situation;
- (26) on-the-job training instructor (OJTI) endorsement the authorisation entered on and forming part of a licence, indicating the competence of the holder to give onthe-job training instruction and instruction on synthetic training devices;
- (27) part-task trainer (PTT) a synthetic training device to provide training for specific and selected operational tasks without requiring the learner to practise all of the tasks which are normally associated with a fully operational environment;
- (28) performance objective a clear and unambiguous statement of the performance expected of the person undertaking the training, the conditions under which the performance takes place and the standards that the person undertaking training should meet:
- (29) positive control service a safety related part of fighter control, during which the controlling unit is responsible for taking actions such as necessary alterations to heading, speed and altitude, in order to avoid collision and to give warning of other known hazards affecting the aircraft;
- (30) provisional inability a temporary state in which the licence holder is prevented from exercising the privileges of the licence when ratings, endorsements and

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- his/her medical certificate are valid;
- (31) psychoactive substance alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psychostimulants, hallucinogens, and volatile solvents, whereas caffeine and tobacco are excluded;
- (32) rating Rating the authorisation entered on and forming part of a licence, stating special conditions, privileges or limitations pertaining to such licence;
- (33) rating endorsement the authorisation entered on and forming part of a licence, indicating the specific conditions, privileges or limitations pertaining to the relevant rating;
- (34) renewal the administrative act taken after a rating, endorsement or certificate has expired that renew the privileges of the rating, endorsement or certificate for a further specified period subject to the fulfilment of specified requirements;
- (35) revalidation -the administrative act taken within the period of validity of a rating, endorsement or certificate that allows the holder to continue to exercise the privileges of a rating, endorsement or certificate for a further specified period subject to the fulfilment of specified requirements;
- (36) sector a part of a control area and/or part of a flight information region or upper region;
- (37) simulator a synthetic training device that presents the important features of the real operational environment and reproduces the operational conditions under which the person undertaking training can practice real-time tasks directly;
- (38) synthetic training device any type of device by which operational conditions are simulated, including simulators and part-task trainers;
- (39) synthetic training device instructor (STDI) endorsement the authorisation entered on and forming part of a licence, indicating the competence of the holder to give instruction on synthetic training devices;
- (40) training course theoretical and/or practical instruction developed within a structured framework and delivered within a defined duration;
- (41) training organisation an organisation which has been certified by the competent authority to provide one or more types of training;
- (42) unit endorsement the authorisation entered on and forming part of a licence, indicating the ICAO location indicator and the sector, group of sectors or working positions where the licence holder is competent to work;
- (43) validation a process by which, through the successful completion of a unit endorsement course associated to a rating or a rating endorsement, the holder may start exercising the privileges of that rating or rating endorsement.

# **APL.20 Transitional provisions**

(a) Licences, ratings and endorsements issued in accordance with MLE-APL 1.1 shall be deemed to have been issued in accordance with this Regulation.

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# APL.25 Replacement of licences, adaptations of privileges, training courses and unit competence schemes

- (a) Air navigation service providers shall adapt their unit competence schemes to comply with the requirements of this Regulation by 1 June 2020 at the latest.
- (b) Certificates of completion of training courses that started prior to the application of this Regulation in accordance with MLE-APL and MAR-ATO shall be accepted for the purpose of the issue of the relevant licences, ratings and endorsements in accordance with this Regulation provided that the training and the assessment have been completed by 1 June 2020 at the latest.

# **APL.30 Entry into force and application**

(a) This Regulation shall enter into force on 1 June 2019. Operators certified as Military Air Navigation Service Provider or Air traffic service Training Organisation need to show compliance no later than 1 June 2020.

# **Final Clause**

This requirement is known as NLD-MAR-APL. This requirement will be published on the intranet site and internet site of the Ministry of Defence.

The Hague, 1 June 2019

The Director of the Military Aviation Authority - The Netherlands

J.P. Apon

Air Commodore

# Annex 1 PART ATCO - REQUIREMENTS FOR THE LICENSING OF AIR CONTROLLERS

# **SUBPART A — GENERAL REQUIREMENTS**

# ATCO.A.001 Scope

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

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

- (a) An application for the issue of licences, ratings and endorsements shall be submitted to the MAA-NLD by MAA-NLD Form 350.
- (b) An application for the issue of further ratings or endorsements, for the revalidation or renewal of endorsements and for the reissue of the licence shall be submitted to the MAA-NLD by MAA-NLD Form 350.
- (c) The licence shall remain the property of the person to whom it is issued, unless it is revoked by the MAA-NLD.
- (d) The licence shall specify all relevant information related to the privileges that are granted by the licence.

# **ATCO.A.010 Exchange of licences**

- (a) If the holder of a license issued by another authority than the MAA-NLD exercises the privileges of the licence within the scope of this regulation, the licence holder shall submit an application to exchange his/her licence for a licence or approval issued by the MAA-NLD.
- (b) For the purposes of the exchange or approval and for exercising the privileges of the licence within the scope of this regulation, the holder of a license issued by an authority other than the MAA-NLD must fulfil the language proficiency requirements referred to in ATCO.B.030 or ATCO.B.031.
- (c) The new licence or approval shall include ratings, rating endorsements, licence endorsements and all valid unit endorsements in the licence, including the date of their first issue and expiry, if applicable.
- (d) Following the receipt of the new licence, the licence holder shall submit an application referred to in ATCO.A.005 together with his/her air controller licence in order to get new ratings, rating endorsements, licence endorsements or unit endorsements.

# 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 ratings, endorsements and of 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.

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- (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 MAA-NLD as defined in that procedure.
- (e) The procedures referred to in point (d) shall be included in the unit competence scheme according to ATCO.B.025(a)(13).

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

- (a) Licences, ratings and endorsements may be suspended or revoked when the licence holder does not comply with the requirements of this Regulation.
- (b) With the issue of the air controller licence the student air controller licence is revoked.

# **SUBPART B — LICENCES, RATINGS AND ENDORSEMENTS**

# ATCO.B.001 Student air traffic controller license, student fighter controller license, student maritime air controller license and student flight information service officer licence

- (a) Holders of a student air traffic controller license, student fighter controller license, student maritime air controller license and student flight information service officer licence shall be authorised to provide air traffic services in accordance with the rating(s) and rating endorsement(s) contained in their licence under the supervision of an on-the-job training instructor and to undertake training for rating endorsement(s).
- (b) Applicants for the issue of a student air traffic controller license, student fighter controller license, student maritime air controller license and student flight information service officer licence shall:
  - (1) be at least 18 years old;
  - (2) have successfully completed initial training at a training organisation satisfying the requirements laid down in MAR ATO relevant to the rating, and if applicable, to the rating endorsement, as set out this Regulation;
  - (3) hold a valid medical certificate;
  - (4) have demonstrated an adequate level of language proficiency in accordance with the requirements set out in ATCO.B.030.
- (c) The student air traffic controller license, student fighter controller license, student maritime air controller license and student flight information service officer 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 license, student fighter controller license, student maritime air controller license and student flight information service officer 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 satisfying the requirements laid down in MAR-ATO and certified to provide initial training relevant to the rating, as to whether he/she continues to satisfy the requirements relevant to that rating, and after satisfying any training requirements resulting from this assessment.

# ATCO.B.005 Air traffic controller, fighter controller licence, maritime air controller license and flight information officer license

- (a) Holders of an air traffic controller licence, fighter controller licence, maritime air controller license and flight information officer license shall be authorised to provide air control services in accordance with the ratings and rating endorsements of their licence, and to exercise the privileges of the endorsements contained therein.
- (b) The privileges of an air traffic controller licence, fighter controller licence, maritime air controller license and flight information officer license shall include the privileges of a student air controller licence as set out in ATCO.B.001(a).

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- (c) Applicants for the first issue of an air traffic controller licence, fighter controller licence, maritime air controller license and flight information officer license shall:
  - (1) hold a student air controller licence;
  - (2) have completed a unit endorsement course and successfully passed the appropriate examinations and assessments in accordance with the requirements set out in Part ATCO, Subpart D, Section 3;
  - (3) hold a valid medical certificate;
  - (4) have demonstrated an adequate level of language proficiency in accordance with the requirements set out in ATCO.B.030.
- (d) The air traffic controller licence, fighter controller licence, maritime air controller license and flight information officer license shall be validated by the inclusion of one or more ratings and the relevant rating, unit and language proficiency endorsements for which the training was successful.
- (e) The holder of an air traffic controller licence, fighter controller licence, maritime air controller license and flight information officer license 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 a training organisation satisfying the requirements laid down in MAR-ATO and certified to provide initial training relevant to the rating, as to whether he/she continues to satisfy the requirements relevant to that rating, and after satisfying any training requirements resulting from this assessment.

# ATCO. B.006 Aeronautical station operator license

- (a) Holders of an aeronautical station operator license shall be authorised to act as an operator in an aeronautical station in accordance with the ratings and rating endorsements of their licence, and to exercise the privileges of the endorsements contained therein.
- (b) Applicants for the first issue of an aeronautical station operator license shall:
  - (1) be at least 18 years old;
  - (2) have completed the MAA-NLD approved aeronautical station operator course and successfully passed the appropriate examinations and assessments in accordance with the requirements set out in Part ATCO, Subpart D, Section 3;
  - (3) have demonstrated an adequate level of language proficiency in accordance with the requirements set out in ATCO.B.030.
  - (4) The aeronautical station operator license shall be validated by the inclusion of one or more ratings and the relevant rating endorsements, unit and language proficiency endorsements for which the training was successful.

### 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:

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- (1) the Aerodrome Control Visual (ADV) rating, indicating that the licence holder is competent to provide an air traffic control service to aerodrome traffic at an aerodrome that has no published instrument approach or departure procedures;
- (2) the Aerodrome Control Instrument (ADI) rating, indicating that the licence holder is competent to provide an air traffic control service to aerodrome traffic at an aerodrome that has published instrument approach or departure procedures and shall be accompanied by at least one of the rating endorsements described in ATCO.B.015(a);
- (3) 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;
- (4) 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;
- (5) the Area Control Procedural (ACP) rating, indicating that the licence holder is competent to provide an air traffic control service to aircraft without the use of surveillance equipment;
- (6) the Area Control Surveillance (ACS) rating, indicating that the licence holder is competent to provide an air traffic control service to aircraft with the use of surveillance equipment.
- (7) the Aerodrome Ground Control (ADG) rating, indicating that the licence holder is competent to provide air traffic control services to aerodrome traffic at an aerodrome that has published instrument approach and/or departure procedures.
- (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 training organisation satisfying the requirements laid down in MAR-ATO 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.

# ATCO.B.011 Fighter 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) the Fighter Controller (FCC) rating, indicating that de licence holder is competent to provide fighter control service under positive control service (PCS) and advisory control service (ACS) and to provide flight information service.
  - (2) the Fighter Allocator (FCA) rating, supplementary to FCC, indicating that the licence holder is competent to provide fighter control service, supervise fighter controllers and coordinate defensive, offensive and supporting operations for the control and coordination of airspace defence.
  - (3) the Above Water Warfare Fixed Wing Controller (AWWFWC) rating, indicating that the licence holder is competent to provide fighter control service.

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(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 training organisation satisfying the requirements laid down in MAR-ATO 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.

# ATCO.B.012 Maritime air 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) the Helicopter Control (HC) rating, indicating that the licence holder is competent to provide air control and emergency services from a ship.
  - (2) the Air Controller (AC) rating, indicating that de licence holder is competent to provide air control and sea based station-related flight information service to air traffic and to provide alerting service to aircraft and emergency services.
- (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 training organisation satisfying the requirements laid down in MAR-ATO 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.

# **ATCO.B.013 Flight Information Service Officer ratings**

- (a) The flight information services officer licence shall contain the following rating in order to indicate the type of service which the licence holder is authorised to provide:
  - (1) Area (AER) to indicate that the licence holder is competent to provide flight information service to air traffic and/or to provide alerting service.
- (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 training organisation satisfying the requirements laid down in MAR-ATO 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.

#### ATCO.B.014 Aeronautical Station Operator ratings

- (a) The aeronautical station officer licence 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) the Aerodrome (ADR) rating, indicating that de licence holder is competent to provide aerodrome information to aerodrome traffic on a non-controlled aerodrome, and to provide alerting service to aircraft and emergency services.

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- (2) the Tactical Aeronautical Station Operator (TASO) rating, indicating that the licence holder is competent to provide aerodrome information under operational and tactical circumstances to aerodrome traffic on and in the vicinity of a landing zone and, where appropriate, to provide alerting service to aircraft and emergency services.
- (b) The holder of a rating who has interrupted exercising the privileges associated with that rating for a period of four or more immediately preceding consecutive years may only start unit training in that rating after assessment of previous competence as to whether the person concerned continues to satisfy the conditions of that rating, and after satisfying any training requirements resulting from this assessment.

# ATCO.B.015 Air traffic controller ratings endorsements

- (a) The Aerodrome Instrument Control (ADI) and Aerodrome Control Visual (ADV) rating shall bear at least one of the following endorsements:
  - (1) the Air Control (AIR) endorsement, indicating that the licence holder is competent to provide air control to traffic flying in the vicinity of an aerodrome and on the runway;
  - (2) the Ground Movement Control (GMC) endorsement, indicating that the licence holder is competent to provide ground movement control;
  - (3) the Tower Control (TWR) endorsement, indicating that the licence holder is competent to provide aerodrome control service. The TWR endorsement includes the privileges of the AIR and GMC endorsements;
  - (4) the Ground Movement Surveillance (GMS) endorsement, granted in addition to the Ground Movement Control endorsement or Tower Control endorsement, indicating that the licence holder is competent to provide ground movement control with the help of aerodrome surface movement guidance systems;
  - (5) the Aerodrome Radar Control (RAD) endorsement, granted in addition to the Air Control endorsement or Tower Control endorsement, indicating that the licence holder is competent to provide aerodrome control with the help of surveillance radar equipment.
- (b) The Approach Control Surveillance (APS) rating may bear one or more of the following endorsements:
  - (1) the Precision Approach Radar (PAR) endorsement, indicating that the licence holder is competent to provide ground-controlled precision approaches with the use of precision approach radar equipment to aircraft on the final approach to the runway;
  - (2) the Surveillance Radar Approach (SRA) endorsement, indicating that the licence holder is competent to provide ground-controlled non-precision approaches with the use of surveillance equipment to aircraft on the final approach to the runway;
  - (3) the Terminal Control (TCL) endorsement, indicating that the licence holder is competent to provide air traffic control services with the use of any surveillance equipment to aircraft operating in a specified terminal area and/or adjacent

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sectors.

- (c) The Area Control Procedural (ACP ) shall bear the following endorsement:
  - (1) Coordinator (COO), indicating that the licence holder is competent to provide air traffic coordination.
- (d) The Area Control Surveillance (ACS) rating may bear one of the following endorsements:
  - the Terminal Control (TCL) endorsement, indicating that the licence holder is competent to provide air traffic control services with the use of any surveillance equipment to aircraft operating in a specified terminal area and/or adjacent sectors;
- (e) The Aerodrome Ground Control (ADG) rating shall bear at least one of the following endorsements:
  - (1) the Ground Movement Control (GMC) endorsement, indicating that the holder is competent to provide air traffic services to ground traffic on an airport without the use of surveillance equipment;
  - (2) the Quick Reaction Alert starts (QRA) endorsement, indicating that the holder is competent to provide local (flight) information and take-off clearance to aircraft which are tasked for a quick reaction alert;
  - (3) the search and rescue (SAR) endorsement, indicating that the holder is competent to provide local (flight)information, take-off clearance to aircraft involved in a search and rescue operation and to provide landing clearance to helicopters involved in a search and rescue operation;
  - (4) the Ground Movement Surveillance (GMS) endorsement, granted in addition to the Ground Movement Control endorsement, indicating that the licence holder is competent to provide ground movement control with the help of aerodrome surface movement guidance systems.

# **ATCO.B.016 Fighter controller ratings endorsements**

- (a) The Fighter Controller (FCC) rating shall bear one of the following endorsements:
  - (1) the Basis Qualified (BQE) endorsement, indicating that the holder is competent to execute elementary peace-time tasks and to support training operations;
  - (2) the Limited Combat Ready (LCR) endorsement, supplementary to and substituting BQE, indicating that the holder is competent to execute peace-time tasks and to support training operations;
  - (3) the Combat Ready (CRE) endorsement, supplementary to and substituting LCR, indicating that the holder is competent to provide fighter control during flight operations in support of all types of flight operations.
- (b) The Fighter Allocator (FCA) rating shall bear one of the following endorsements:
  - (1) the Limited Combat Ready (LCR) endorsement, indicating that the holder is competent to execute peace-time tasks and to support training operations;

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- (2) the Combat Ready (CRE) endorsement, supplementary to and substituting LCR, indicating that the holder is, competent to supervise fighter controllers and to co-ordinate missions in support of all types of flight operations.
- (c) The Above Water Warfare Fixed Wing Controller (AWWFCW) rating shall bear the following endorsement:
  - (1) The NATO graded (NG) endorsement, indicating that the licence holder possesses a NATO Grade. This grade shall be administrated in the holders' personal logbook.

# **ATCO.B.017 Maritime Air Controller ratings endorsements**

- (a) The Helicopter Control rating shall bear the following endorsement:
  - (1) Non Tactical (NT) endorsement, indicating that the licence holder is competent to provide helicopter air control and sea based station-related flight information to one helicopter simultaneously, to provide alerting service to aircraft and to provide emergency services.
- (b) The Air Control rating shall bear the following endorsement:
  - (1) NATO graded NG endorsement, indicating that the licence holder possesses a NATO Grade. This grade shall be administrated in the holders' personal logbook.

# ATCO.B.018 Flight Information Service Officer ratings endorsements

- (a) The Area (AER) rating shall bear at least one of the following endorsements:
  - (1) The Radar (RAD) endorsement, indicating that the licence holder is competent to provide information to air traffic with the use of surveillance equipment;
  - (2) The Range Control (RCO) endorsement, indicating that the licence holder is competent to provide flight information service and/or to provide alerting to air traffic in (or in the vicinity of) a segregated exercise area, used for active firing or bombing;
  - (3) The Clearance Delivery (CLD) endorsement, in addition to the RAD and/or RCO endorsement indicating that the licence holder is competent to deliver a clearance by order and under the responsibility of an air traffic controller.

#### ATCO.B.019 Aeronautical Station Operator ratings endorsements

- (a) The Aerodrome (ADR) rating may bear the following endorsement:
  - (1) the SBS (Sea Based Station) endorsement, indicating that the licence holder is competent to provide sea based station-related flight information to air traffic, to provide alerting service to aircraft and to provide emergency services.
- (b) The Tactical Aeronautical Station Operator (TASO) rating may bear the following endorsement:
  - (1) Temporary Landing Zone (TLZ) endorsement, indicating that the licence holder is competent to provide aerodrome information to air traffic, to provide alerting service to aircraft and to provide emergency services.

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# **ATCO.B.020 Unit endorsements**

- (a) The unit endorsement shall authorise the licence holder to provide air control services for a specific sector, group of sectors and/or working positions under the responsibility of an air services unit.
- (b) Applicants for a unit endorsement shall have successfully completed a unit endorsement course in accordance with the requirements set out in Part ATCO, Subpart D, Section 3.
- (c) Applicants for a unit endorsement following an exchange of a licence referred to in ATCO.A.010 shall, in addition to the requirements set out in point (b), meet the requirements of ATCO.D.060(f).
- (d) For air traffic controllers providing air traffic control services to aircraft carrying out flight tests, the MAA-NLD may, in addition to the requirements set out in point (b), set out additional requirements to be met.
- (e) Unit endorsements shall be valid for a period defined in the unit competence scheme. This period shall not exceed three years.
- (f) The validity period of unit endorsements for initial issue and renewal shall start not later than 30 days from the date on which the assessment has been successfully completed.
- (g) Unit endorsements shall be revalidated if:
  - (1) the applicant has been exercising the privileges of the licence for a minimum number of hours as defined in the unit competence scheme;
  - (2) the applicant has undertaken refresher training within the validity period of the unit endorsement according to the unit competence scheme;
  - (3) the applicant's competence has been assessed in accordance with the unit competence scheme not earlier than three months prior to the expiry date of the unit endorsement.
- (h) Unit endorsements shall be revalidated, provided that the requirements set out in point (g) are met, within the 3-month period immediately preceding their expiry date. In such cases the validity period shall be counted from that expiry date.
- (i) If the unit endorsement is revalidated before the period provided for in point (h), its validity period shall start not later than 30 days from the date on which the assessment has been successfully completed, provided that the requirements in point (g)(1) and (2) are also met.
- (j) If the validity of a unit endorsement expires, the licence holder shall successfully complete the unit endorsement course in accordance with the requirements set out in Part ATCO, Subpart D, Section 3 in order to renew the endorsement.

# **ATCO.B.025 Unit competence scheme**

- (a) Unit competence schemes shall be established by the air control service provider and approved by the MAA-NLD. It shall include at least the following elements:
  - (1) the validity of the unit endorsement in accordance with ATCO.B.020(e);

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- (2) the maximum continuous period when the privileges of a unit endorsement are not exercised during its validity. This period shall not exceed 90 calendar days;
- (3) the minimum number of hours for exercising the privileges of the unit endorsement within a defined period of time, which shall not exceed 12 months, for the purpose of ATCO.B.020(g)(1). For on-the-job training instructors exercising the privileges of the OJTI endorsement the time spent instructing shall be counted for the maximum of 50% of the hours required for revalidation of the unit endorsement;
- (4) procedures for the cases where the licence holder does not meet the requirements set out in point (a)(2) and (3);
- (5) processes for assessing competence, including assessment of the refresher training subjects according to ATCO.D.080(b);
- (6) processes for the examination of theoretical knowledge and understanding necessary to exercise privileges of the ratings and endorsements;
- (7) processes to identify the topics and subtopics, objectives and training methods for continuation training;
- (8) the minimum duration and frequency of the refresher training;
- (9) processes for the examination of theoretical knowledge and/or the assessment of practical skills acquired during conversion training, including pass marks for examinations;
- (10) processes in case of failure of an examination or assessment, including the appeal processes;
- (11) training personnel qualifications, roles and responsibilities;
- (12) procedure to ensure that practical instructors have practised instructional techniques in the procedures in which it is intended to provide instruction in accordance with ATCO.C.010(b)(3) and ATCO.C.030(b)(3);
- (13) procedures for the declaration and the management of cases of provisional inability to exercise the privileges of a licence, as well as for informing the MAA-NLD;
- (14) identification of records to be kept specific to continuation training and assessments;
- (15) process and reasons for reviewing and amending the unit competence scheme and its submission to the MAA-NLD. The review of the unit competence scheme shall take place at least once every three years.
- (b) In order to comply with the requirement set out in point (a)(3), air control service providers shall keep records of the hours, during which each licence holder exercises the privileges of his/her unit endorsement working in sectors, group of sectors and/or working positions in the ATC unit and shall provide that data to the competent authorities and to the licence holder upon request.
- (c) When establishing the procedures referred to in point (a)(4) and (13) air navigation

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service providers shall ensure that mechanisms are applied to guarantee fair treatment of licence holders where the validity of their endorsements cannot be extended.

# ATCO.B.030 Language proficiency endorsement air traffic controllers, fighter controllers, maritime air controllers, flight information service officers and aeronautical station operators.

- (a) air traffic controllers, fighter controllers, maritime air controllers, flight information service officers, aeronautical station operators and student air traffic controllers, student fighter controllers, student maritime air controllers and student flight information service officers shall not exercise the privileges of their licences unless they have a valid language proficiency endorsement in English. The language proficiency endorsement shall indicate the language(s), the level(s) of proficiency and the expiry date(s).
- (b) The language proficiency level shall be determined in accordance with the rating scale set out in Appendix 1 of Annex 1. By way of derogation, the language proficiency of a TASO shall be determined in accordance with the rating scale set out in NATO STANAG 6001 Edition 4.
- (c) The applicant for any language proficiency endorsement shall demonstrate, in accordance with the rating scale referred to in point (b), at least an operational level (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 language proficiency rating scale set out in Appendix 1 of Annex 1 may be required by the air navigation service provider, where the operational circumstances of the particular rating or endorsement warrant a higher level of 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 MAA-NLD.
- (e) Language proficiency shall be demonstrated by a certificate attesting the result of the assessment.
- (f) ATCO.B.030.a is not applicable for aeronautical station operators when the applicant

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is holder of a valid (civil or military) air traffic controller or a military pilot licence.

# ATCO.B.035 Validity of language proficiency endorsement

- (a) The validity of the language proficiency endorsement, depending on the level determined in accordance with Appendix 1 of Annex 1, 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):
    - i. nine years from the date of assessment, for the English language;
    - ii. unlimited, for any other language(s) referred to in ATCO.B.030(a).
- (b) The validity period of the language proficiency endorsements for initial issue and renewal shall start not later than 30 days from the date on which the language proficiency assessment has been successfully completed.
- (c) Language proficiency endorsements shall be revalidated following successful completion of the language proficiency assessment taking place within three months immediately preceding their expiry date. In such cases the new validity period shall be counted from that expiry date.
- (d) If the language proficiency endorsement is revalidated before the period provided for in point (c), its validity period shall start not later than 30 days from the date on which the language proficiency assessment has been successfully completed.
- (e) When the validity of a language proficiency endorsement expires, the licence holder shall successfully complete a language proficiency assessment in order to have his/her endorsement renewed.

# ATCO.B.040 Assessment of language proficiency

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

# **ATCO.B.045 Language training**

- (a) Air control service providers shall make available language training, to maintain the required level of language proficiency of air controllers to:
  - (1) holders of language proficiency endorsement at operational level (level four);

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	(2) li	cence h	olders v	vithout t	the oppo anguage	rtunity t	o apply	their sk	ills on a	regular	basis in	1
(b)	Langu	ıage tra	iining m	ay also	be made	e availab	ole in the	e form o	f contin	uous tra	iining.	
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# 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 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.

# **ATCO.C.005 Practical instructors**

A person shall only carry out practical training when he/she holds an air controller licence with an on-the-job training instructor (OJTI) endorsement or a synthetic training device instructor (STDI) 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 unit endorsement is held and on synthetic training devices in the ratings held.
- (b) Holders of an OJTI endorsement shall only exercise the privileges of the endorsement if they have:
  - (1) exercised for at least two years the privilege of the rating they will instruct in;
  - (2) exercised for an immediately preceding period of at least six months the privilege of the valid unit endorsement, in which instruction will be given;
  - (3) practised instructional skills in those procedures in which it is intended to provide instruction.
- (c) The period of two years referred to in point (b)(1) can be shortened to not less than one year by the MAA-NLD when requested by the training organisation.

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

Applicants for the issue of an OJTI endorsement shall:

- (a) hold an air controller licence with a valid unit endorsement;
- (b) have exercised the privileges of an air 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 MAA-NLD when requested by the training organisation; and
- (c) within the year preceding the application, have successfully completed a practical instructional techniques course during which the required knowledge and

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pedagogical skills are taught and have been appropriately assessed.

# 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.
- (d) In the case of first issue and renewal the period of validity of the OJTI endorsement shall start not later than 30 days from the date on which the assessment has been successfully completed.
- (e) If the requirements of ATCO.C.015(a) and (b) are not met the OJTI endorsement may be exchanged for a STDI endorsement, provided that compliance with the requirements of ATCO.C.040(b) and (c) is ensured.

# **ATCO.C.025 Temporary OJTI authorisation**

- (a) When compliance with the requirements provided for in ATCO.C.010(b)(1) or ATCO.C.010(b)(2) is not possible, the MAA-NLD may grant temporary OJTI authorisation based on a safety analysis presented by the air navigation service provider.
- (b) The temporary OJTI authorisation referred to in point (a) may be issued to holders of a valid OJTI endorsement issued in accordance with ATCO.C.015.
- (c) The temporary OJTI authorisation referred to in point (a) shall be limited to the instruction necessary to cover exceptional situations and its validity shall not exceed one year or the expiration of the validity of the OJTI endorsement issued in accordance with ATCO.C.015, whichever occurs sooner.

# ATCO.C.030 Synthetic training device instructor (STDI) privileges

- (a) Holders of a STDI endorsement are authorised to provide practical training on synthetic training devices:
  - (1) for subjects of practical nature during initial training;
  - (2) for unit training other than OJT; and
  - (3) for continuation training.

Where the STDI is providing pre-OJT, he/she shall hold or have held the relevant

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unit endorsement.

- (b) Holders of an STDI endorsement shall only exercise the privileges of the endorsement if they have:
  - (1) at least two years' experience in the rating they will instruct in;
  - (2) demonstrated knowledge of current operational practices;
  - (3) practised instructional techniques in those procedures in which it is intended to provide instruction.
- (c) Notwithstanding point (b)(1)
  - (1) for the purpose of basic training any rating held is appropriate;
  - (2) for the purpose of rating training, training may be provided for specific and selected operational tasks by a STDI holding a rating that is relevant for that specific and selected operational task.

# ATCO.C.035 Application for synthetic training device instructor endorsement

Applicants for the issue of a STDI endorsement shall:

- (a) have exercised the privileges of an air controller licence in any rating for at least two years; and
- (b) within the year preceding the application have successfully completed a practical instructional techniques course during which the required knowledge and pedagogical skills are taught using theoretical and practical methods and have been appropriately assessed.

# ATCO.C.040 Validity of synthetic training device instructor endorsement

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

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### **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:
  - (1) during initial training for the issue of a student air controller licence or for the issue of a new rating and/or rating endorsement, if applicable;
  - (2) of previous competence for the purpose of ATCO.B.001(d) and ATCO.B.010(b);
  - (3) of student air controllers for the issue of a unit endorsement and rating endorsements, if applicable;
  - (4) of air controllers for the issue of a unit endorsement and rating endorsements, if applicable, as well as for revalidation and renewal of a unit endorsement;
  - (5) of applicant practical instructors or applicant assessors when compliance with the requirements of point (d)(2) to (4) is ensured.
- (c) Holders of an assessor endorsement shall only exercise the privileges of the endorsement if they have:
  - (1) at least two 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 unit endorsement, if they also hold the unit endorsement 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 STDI endorsement, if they hold an STDI or 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 OJTI endorsement, if they hold an OJTI endorsement and have exercised the privileges of that endorsement for at least three years;
  - (4) 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 unit endorsement, and for ensuring supervision on the operational working position, the assessor shall also hold an OJTI endorsement, or an OJTI holding the valid unit endorsement associated with the assessment shall be present.

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# **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 controller licence for at least two years; and
- (b) within the year preceding the application have successfully completed an assessor course during which the required knowledge and skills are taught using theoretical and practical methods, and have been appropriately assessed.

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

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

#### ATCO.C.065 Temporary assessor authorisation

- (a) When the requirement provided for in ATCO.C.045 (d)(1) cannot be met, the MAA-NLD may authorise holders of an assessor endorsement issued in accordance with ATCO.C.055 to carry out assessments referred to in ATCO.C.045(b)(3) and (4) to cover exceptional situations or to ensure the independence of the assessment, provided that the requirements set out in points (b) and (c) are met.
- (b) For the purpose of covering exceptional situations the holder of the assessor endorsement shall also hold a unit endorsement with the associated rating and, if applicable, rating endorsement, relevant to the assessment for an immediately preceding period of at least one year. The authorisation shall be limited to the assessments necessary to cover exceptional situations and shall not exceed one year or the validity of the assessor endorsement issued in accordance with ATCO.C.055, whichever occurs sooner.
- (c) For the purpose of ensuring the independence of the assessment for reasons of recurrent nature the holder of the assessor endorsement shall also hold a unit endorsement with the associated rating and, if applicable, rating endorsement, relevant to the assessment for an immediately preceding period of at least one year. The validity of the authorisation shall be determined by the MAA-NLD but shall not

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exceed the validity of the assessor endorsement issued in accordance with ATCO.C.055.

(d) For issuing a temporary assessor authorisation for the reasons referred to in points (b) and (c) the MAA-NLD may require a safety analysis to be presented by the air navigation service provider.

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# **SUBPART D — AIR CONTROLLER TRAINING**

# **SECTION 1 - GENERAL REQUIREMENTS**

# ATCO.D.001 Objectives of air controller training

Air 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 controller training

- (a) Air controller training shall consist of the following types:
  - (1) initial training, leading to the issue of a student air controller licence or to the issue of an additional rating and, if applicable, rating endorsement, providing:
    - i. 'basic training' theoretical and practical training designed to impart fundamental knowledge and practical skills related to basic operational procedures;
    - ii. 'rating training': theoretical and practical training designed to impart knowledge and practical skills related to a specific rating and, if applicable, to rating endorsement;
  - (2) unit training, leading to the issue of an air controller licence, the issue of a rating endorsement, the validation of rating(s) or rating endorsement(s) and/or the issue or renewal of a unit endorsement. It comprises the following phases:
    - transitional training phase, designed primarily to impart knowledge and understanding of site-specific operational procedures and task-specific aspects; and
    - ii. on-the-job training phase, which is the final phase of unit training during which previously acquired job-related routines and skills are integrated in practice under the supervision of a qualified on-the-job training instructor in a live traffic situation.
    - iii. In addition to points (i) and (ii), for unit endorsement(s) that require the handling of complex and dense traffic situations, a pre-on-the-job training phase is required to enhance the previously acquired rating routines and skills and to prepare for live traffic situations which may be encountered in that unit:
  - (3) continuation training, designed to maintain the validity of the endorsements of the licence, consisting of:
    - i. refresher training;
    - ii. conversion training, when relevant.
- (b) In addition to the types of training referred to in point (a), air controllers may undertake the following types:
  - (1) practical instructors' training, leading to the issue, revalidation or renewal of an

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OJTI or STDI endorsement;

(2) assessor training, leading to the issue, revalidation or renewal of an assessor endorsement.

# **SECTION 2 - INITIAL TRAINING REQUIREMENTS**

#### ATCO.D.010 Composition of initial training air traffic controller

- (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 applicable subjects, topics and subtopics contained in Appendix 2; and
  - (2) rating training, comprising the subjects, topics and subtopics of at least one of the following:
    - i. Aerodrome Control Visual Rating ADV, defined in Appendix 3 of Annex 1;
    - ii. Aerodrome Control Instrument Rating for Tower ADI (TWR), defined in Appendix 4 of Annex 1;
    - iii. Approach Control Procedural Rating APP, defined in Appendix 5 of Annex 1;
    - iv. Area Control Procedural Rating ACP, defined in Appendix 6 of Annex 1;
    - v. Approach Control Surveillance Rating APS, defined in Appendix 7 of Annex 1;
    - vi. Area Control Surveillance Rating ACS, defined in Appendix 8 of Annex 1.
    - vii. Aerodrome Ground Control Rating ADG, defined in appendix 9 of Annex 1.
- (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 Functional Airspace Block (FAB) or to the national environment.

#### ATCO.D.011 Composition of initial training fighter controller

- (a) Initial training, intended for an applicant for a student fighter controller license or for the issue of an additional rating and/or rating endorsement, shall consist of:
  - (1) Basic training FCC, FCA and AWWFWC:

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- satisfying at least the objectives as described in the applicable NATO regulations for fighter controllers, and as far as applicable ATCO.D.010, so that fighter controllers are capable of providing air traffic services in a safe, quick and efficient way;
- ii. in addition to ATCO.D.011 a (1) the basic training of the AWWFWC shall ensure:
  - A. a good knowledge of principles for above water warfare and associated procedures, capabilities and limitations of Air Surveillance and Control System (ASACS) and ship-borne above water warfare systems as relevant, electronic warfare as applicable to air operations, air defence principles and procedures where relevant, air defence weapons systems and airspace management where relevant, capabilities and limitations of radar and communications equipment;
  - B. a general knowledge of environmental conditions (e.g. meteorology) as they affect air operations, plotting procedures.
- (2) Rating training, comprising all the subjects, topics and subtopics contained in Appendix 10 of Annex 1:
  - i. Fighter Controller Rating FCC, defined in Appendix 10 of Annex 1;
  - ii. Fighter Allocator Rating FCA, defined in Appendix 10 of Annex 1;
  - iii. Above Water Warfare Fixed Wing Controller AWWFWG, defined in Appendix 10 of Annex 1.
- (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.011(b) shall be tailored according to the result of that assessment.
- (d) Training intended for a rating endorsement 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 Functional Airspace Block (FAB) or to the national environment.

# ATCO.D.012 Composition of initial training maritime air controller

- (a) Initial training, intended for an applicant for a student maritime air controller license or for the issue of an additional rating and/or rating endorsement, shall consist of:
  - (1) Basic training satisfying at least the objectives to ensure that maritime air controllers have the knowledge and capabilities for practical helicopter control, including the application of any appropriate safety related control, recovery and emergency procedures based on simulated and live control experience.
  - (2) Rating training, comprising all the subjects, topics and subtopics contained in Appendix 11 of Annex 1:

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- i. Helicopter Control HC, defined in Appendix 11 of Annex 1;
- ii. Air Control- AC, as defined in Appendix 11 of Annex 1.
- (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.012(b) shall be tailored according to the result of that assessment.
- (d) Training intended for a rating endorsement 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 Functional Airspace Block (FAB) or to the national environment.

# ATCO.D.013 Composition of initial training flight information service officer

- (a) Initial training, intended for an applicant for a student flight information service officer license or for the issue of an additional rating and/or, if applicable, rating endorsement, shall consist of:
  - (1) basic training, comprising all the applicable subjects, topics and subtopics contained in Appendix 1; and
  - (2) rating training, comprising the applicable subjects, topics and subtopics of at least one of the following:
    - (i) Area Rating AER, defined in Appendix 8 of Annex 1;
    - (ii) Range control RCO, defined in Appendix 8 of Annex 1;
- (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.013(b) shall be tailored according to the result of that assessment.
- (d) Training intended for a rating endorsement shall consist of subjects, topics and subtopics developed by the training organisation and approved as part of the training course.

Basic and/or rating training may be complemented with subjects, topics and subtopics that are additional or specific to the Functional Airspace Block (FAB) or to the national environment.

# ATCO.D.014 Composition of initial training aeronautical station operator:

- (a) Initial training, intended for an applicant for an aeronautical station operator licence or for the issue of an additional rating and/or, if applicable, rating endorsement, shall consist of:
  - (1) thorough knowledge of the aerodrome;
  - (2) airspace structure;
  - (3) rules and regulations;
  - (4) navigation- and approach equipment;
  - (5) communication-, information- and switchboard equipment;
  - (6) meteorology;
  - (7) emergency and alerting procedures;

# ATCO.D.015 Initial training plan

An initial training plan shall be established by the training organisation and approved by the MAA-NLD. 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), the process for adapting the initial training course(s) to take due account of a successfully completed basic training course;
- (g) the 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) the process for early termination of training;
- (j) the appeal process;
- (k) identification of records to be kept specific to initial training;
- (I) process and reasons for reviewing and amending the initial training plan and its submission to the MAA-NLD. 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.

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- (b) Basic and rating training courses or an integrated initial training course shall be developed and provided by training organisations and approved by the MAA-NLD.
- (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 issued by the training organisation.
- (e) The successful completion of basic training shall be demonstrated by a certificate issued by the training organisation upon request of the applicant.

# 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;

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- (k) detecting potential conflicts between aircraft;
- (I) 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) and Aerodrome Control Instrument (ADI) 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

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- (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.
- (h) In addition to point (b), rating training performance objectives for Aerodrome Ground Control (ADG) 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.

# **SECTION 3 - UNIT TRAINING REQUIREMENTS**

# ATCO.D.045 Composition of unit training

- (a) Unit training shall consist of training course(s) for each unit endorsement established at the air control unit as defined in the unit training plan.
- (b) The unit endorsement course(s) shall be developed and provided by training organisations according to ATCO.D.060 and approved by the MAA-NLD.
- (c) Unit training shall include training in:
  - (1) operational procedures;
  - (2) task-specific aspects;
  - (3) abnormal and emergency situations; and
  - (4) human factors.

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# ATCO.D.050 Prerequisites of unit training air traffic controller, student fighter controller, maritime air controller or student flight information officer

Unit training may only be started by persons who are holders of:

- (a) a student air traffic controller licence, student fighter controller license, student maritime air controller license or student flight information officer license with the appropriate rating and, if applicable, rating endorsement; or
- (b) an air controller licence with the appropriate rating and, if applicable, rating endorsement; provided that the requirements set out in ATCO.B.001(d) and ATCO.B.010(b) or ATCO.B.011(b), ATCO.B.012(b) or ATCO.B.013(b) are met.

#### ATCO.D.051 Prerequisites of unit training aeronautical station officer

Unit training may be started provided that the student aeronautical station operator successfully completed the initial training.

# ATCO.D.055 Unit training plan

- (a) The unit training plan shall be established by the training organisation for each Air control unit and shall be approved by the MAA-NLD.
- (b) The unit training plan shall contain at least:
  - (1) ratings and endorsements for which the training is conducted;
  - (2) the structure of the unit training;
  - (3) the list of unit endorsement course(s) according to ATCO.D.060;
  - (4) the process for the conduct of a unit endorsement course;
  - (5) the training methods;
  - (6) the minimum duration of the unit endorsement course(s);
  - (7) process for adapting the unit endorsement course(s) to take due account of the acquired ratings and/or rating endorsements and experience of applicants, when relevant;
  - (8) processes for demonstrating theoretical knowledge and understanding according to ATCO.D.065, including the number, frequency and type of, as well as pass marks for examinations, which shall be a minimum of 75 % of the marks allocated to these examinations;
  - (9) processes for the assessment according to ATCO.D.070, including the number and frequency of assessments; training personnel qualifications, roles and responsibilities;
  - (10) training personnel qualifications, roles and responsibilities;
  - (11) process for early termination of training;
  - (12) the appeal process;
  - (13) identification of records to be kept specific to the unit training;

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- (14) a list of identified abnormal and emergency situations specific for each unit endorsement;
- (15) process and reasons for reviewing and amending the unit training plan and its submission to the MAA-NLD. The review of the unit training plan shall take place at least once every three years.

# ATCO.D.060 Unit endorsement course

- (a) A unit endorsement course shall be the combination of the relevant unit training phases for the issue or renewal of a unit endorsement in the licence. Each course shall contain:
  - (1) a transitional training phase;
  - (2) an on-the-job training phase.

A pre-on-the-job training phase shall be included, if required, according to ATCO.D.005(a)(2).

- (b) The unit training phases referred to in paragraph (a) shall be provided separately or in an integrated manner.
- (c) Unit endorsement courses shall define the syllabus and the performance objectives in accordance with ATCO.D.045(c) and shall be conducted in accordance with the unit training plan.
- (d) Unit endorsement courses that include training for rating endorsement(s) according to ATCO.B.015 shall be supplemented with additional training that allows for the acquisition of the concerned rating endorsement skills.
- (e) Training intended for a rating endorsement other than ATCO.B.015(a)(3) shall consist of subjects, subject objectives, topics and subtopics developed by the training organisation and approved as part of the training course.
- (f) Unit endorsement courses undertaken following an exchange of a licence shall be adapted to include elements of initial training that are specific to the Functional Airspace Block or to the national environment.

# ATCO.D.065 Demonstration of theoretical knowledge and understanding

Theoretical knowledge and understanding shall be demonstrated by examinations. ATCO.D.070 Assessments during unit endorsement courses

- (a) The applicant's assessment shall be conducted in the operational environment under normal operational conditions at least once at the end of the on-the-job training.
- (b) When the unit endorsement course contains a pre-on-the-job training phase, the applicant's skills shall be assessed on a synthetic training device at least at the end of this phase.
- (c) Notwithstanding point (a), a synthetic training device may be used during a unit endorsement assessment to demonstrate the application of trained procedures not encountered in the operational environment during the assessment.

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# **SECTION 4 - CONTINUATION TRAINING REQUIREMENTS**

# **ATCO.D.075 Continuation training**

Continuation training shall consist of refresher and conversion training courses and shall be provided according to the requirements contained in the unit competence scheme according to ATCO.B.025.

# **ATCO.D.080 Refresher training**

- (a) Refresher training course(s) shall be developed and provided by training organisations and approved by the MAA-NLD.
- (b) Refresher training shall be designed to review, reinforce or enhance the existing knowledge and skills of air controllers to provide a safe, orderly and expeditious flow of air traffic and shall contain at least:
  - (1) standard practices and procedures training, using approved phraseology and effective communication;
  - (2) abnormal and emergency situations training, using approved phraseology and effective communication; and
  - (3) human factors training.
- (c) A syllabus for the refresher training course shall be defined, and where a subject refreshes skills of air controllers, performance objectives shall also be developed.

# **ATCO.D.085 Conversion training**

- (a) Conversion training course(s) shall be developed and provided by training organisations and approved by the MAA-NLD.
- (b) Conversion training shall be designed to provide knowledge and skills appropriate to a change in the operational environment and shall be provided by training organisations when the safety assessment of the change concludes the need for such training.
- (c) Conversion training courses shall include the determination of:
  - (1) the appropriate training method for and duration of the course, taking into account the nature and extent of the change; and
  - (2) the examination and/or assessment methods for the conversion training.
- (d) Conversion training shall be provided before air controllers exercise the privileges of their licence in the changed operational environment.

# **SECTION 5 - 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 and/or STDI, 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 MAA-NLD.

# **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 MAA-NLD.

# Appendix 1 of Annex 1 LANGUAGE PROFICIENCY RATING SCALE — REQUIREMENTS FOR PROFICIENCY IN LANGUAGES

# Language proficiency rating scale: expert, extended and operational levels

Level	Pronunciation	Structure	Vocabulary	Fluency	Comprehension	Interactions
	3	Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task				
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.	length with a natural, effortless flow. Varies speech flow for stylistic effect, e.g. to	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.

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Level		Structure Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task	Vocabulary	Fluency	Comprehension	Interactions
	Pronunciation, stress, rhythm and intonation, though influenced by the first language or regional variation, rarely in-terfere with ease of understanding.	Basic grammatical structures and sentence patterns are consistently well controlled. Complex structures are at-tempted but with errors which sometimes interfere with meaning.	Vocabulary range and accuracy are sufficient to communicate effectively on common, concrete, and work-related topics. Paraphrases consistently and successfully. Vocabulary is sometimes idiomatic.	Able to speak at length with relative ease on familiar topics, but may not vary speech flow as a stylistic device. Can make use of appropriate discourse markers or connectors.	Comprehension is accurate on common, concrete, and work-related topics and mostly accurate when the speaker is confronted with a linguistic or situational complication or an unexpected turn of events. Is able to com-prehend a range of speech varieties (dialect and/or accent) or registers.	

Level		Structure Relevant grammatical structures and sentence patterns are determined by language functions appropriate to the task	Vocabulary	Fluency	Comprehension	Interactions
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 pat- terns are used creatively and are usually well controlled. Errors may occur, particularly in unusual or unexpected circumstances, but rarely interfere with meaning.	Vocabulary range and accuracy are usually sufficient to communicate effectively on common, concrete, and work-related topics. Can often paraphrase successfully when lacking vocabulary in unusual or unexpected circumstances.	Produces stretches of language at an appropriate tempo. There may be occasional loss of fluency on transition from rehearsed or formulaic speech to spontaneous interaction, but this does not prevent effective communication. Can make limited use of discourse markers or connectors. Fillers are not distracting.	Comprehension is mostly accurate on common, concrete, and work-related topics when the accent or variety used is sufficiently intelligible for an international community of users. When the speaker is confronted with a linguistic or situational complication or an unexpected turn of events, comprehension may be slower or require clarification strategies.	Responses are usually immediate, appropriate, and informative. Initiates and maintains exchanges even when dealing with an unexpected turn of events. Deals adequately with apparent misunderstandings by checking, confirming, or clarifying.

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Language proficiency rating scale: pre-operational, elementary and pre-elementary levels

Level	Pronunciation	Structure	Vocabulary	Fluency	Comprehension	Interactions
Lovei	Uses a dialect and/or accent intelligible to the aeronautical community	Relevant grammatical Structures and sentence patterns are determined by language functions appropriate to the task	Vocabalary	ridency	Completions	Theoracaons
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 pat- terns associated with predictable situations are not always well con- trolled. 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 of-ten 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 predict- able situations. Generally inadequate when dealing with an unexpected turn of events.
Elementary 2	Pronunciation, stress, rhythm and intonation are heavily in- fluenced by the first language or regional variation and usually interfere with ease of	Shows only limited control of a few simple memorised grammatical structures and sentence patterns.	Limited vocabulary range consisting only of isolated words and memorised phrases.	Can produce very short, isolated, memorised utterances with frequent pausing and a distracting use of fillers to search for expressions and to	Comprehension is limited to isolated, memorised phrases when they are carefully and slowly articulated.	Response time is slow, and often inappropriate. Interaction is limited to simple routine exchanges.

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

# Appendix 2 of Annex 1 BASIC TRAINING

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

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(Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(i))

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(Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(iv))

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(Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(v))

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(Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(vi)) (Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.013(a)(2))

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## **SUBJECT 5: NAVIGATION**

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Subtopic NAV 1.1 - Maps and charts

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TOPIC ABES 2 — SKILLS IMPROVEMENT

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Subtopic ABES 2.3 — Air/ground cooperation

TOPIC ABES 3 — PROCEDURES FOR ABNORMAL AND EMERGENCY SITUATIONS

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## Appendix 9 of Annex 1 AERODROME GROUND CONTROL RATING FOR TOWER — ADG

(Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.010(a)(2)(vii))

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TOPIC MET 2 — SOURCES OF METEOROLOGICAL DATA

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Appendix 10 of Annex 1 FIGHTER CONTROLLER RATING — FCC, FCA and AWWFWC

(Reference: Annex 1 - PART ATCO Subpart D, Section 2, ATCO.D.011(a)(2))

The initial training and unit training shall cover the following subjects adequately in relation to the relevant rating(s) and/or endorsements:

Subject 1. aviation law;

Subject 2. fighter control procedures;

Subject 3. air Control terms and definitions;

Subject 4. knowledge of air defence and interception tactics related to aircraft performance and actual treat;

Subject 5. knowledge of air defence weapon systems and related airspace management;

Subject 6. knowledge of equipment, systems and distribution of information;

Subject 7. system defects;

Subject 8. linguistic knowledge and skills, including communications procedures and phraseology;

Subject 9. unusual- and emergency situations;

Subject 10. meteorology;

Subject 11. navigation;

Subject 12. human factors;

Subject 13. safety and safety culture;

Subject 14. safety management systems;

Subject 15. tactical air support for maritime operations.

# Appendix 11 of Annex 1 MARITIME AIR CONTROLLER RATING - HC/AC

(Reference: Annex 1 — PART ATCO Subpart D, Section 2, ATCO.D.011(a)(2)(iii))

The initial training and unit training shall cover the following subjects adequately in relation to the relevant rating(s) and/or endorsements:

- Subject 1. the capabilities and limitations of radar and communications equipment;
- Subject 2. plotting procedures;
- Subject 3. air control terms and definitions as described in STANAG 3993;
- Subject 4. environmental conditions (e.g. meteorology) as they affect helicopter operations;
- Subject 5. air traffic control procedures;
- Subject 6. capabilities and limitations of helicopters which the controller might reasonably be expected to control;
- Subject 7. communications procedures used in aircraft control;
- Subject 8. helicopter emergency, search and rescue procedures;
- Subject 9. safety management systems.