



**MILITARY AIR TRAFFIC CONTROLLER
INITIAL TRAINING**

**Initial training composition
Aerodrome Control (ADC)**

Edition Number	1.0
Edition Date	03 July 2024
Status	Approved

**MILITARY AIR TRAFFIC CONTROLLER
WORKING GROUP**

DOCUMENT CHANGE RECORD

Edition Number	Edition Date	Status	Reason for change (detailed)	Pages affected
1.0	3 July 2024	Approved	Initial issue	All

STATUS

The Status of the document can take 3 values:

Working Draft: Working copy to develop the proposed version or revision of the document.

Draft: Version to be proposed to the ESMAB Policy by the MATCO Working Group

Approved: Final version approved* by the ESMAB Policy for publication.

EDITION

The Edition value of document will have the following template: **Edition X.YY:**

The **value of X** will change after a **major** revision of the document.

The **value of Y** will change after a **minor** revision of the document.

* It should be noted that the approval by ESMAB Policy is given with the clear understanding that the document is legally non-binding and its potential implementation remains fully a decision to be taken at national level.

Edition Number : 1.0	Edition Date : 03 July 2024	Status: Approved	Page 2/30
----------------------	-----------------------------	------------------	-----------

TABLE OF CONTENTS

SUBJECT 1: INTRODUCTION TO THE COURSE.....	5
SUBJECT 2: AVIATION LAW.....	5
SUBJECT 3: AIR TRAFFIC MANAGEMENT	7
SUBJECT 4: METEOROLOGY	15
SUBJECT 5: NAVIGATION.....	16
SUBJECT 6: AIRCRAFT.....	17
SUBJECT 7: HUMAN FACTORS	19
SUBJECT 8: EQUIPMENT AND SYSTEMS	22
SUBJECT 9: PROFESSIONAL ENVIRONMENT	24
SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS	25
SUBJECT 11: AERODROMES.....	28

COMPOSITION OF MILITARY ATCO INITIAL ADC RATING TRAINING:

For reference use: AMC1 ATCO.D.010(a)(2)(i) Composition of initial ADC rating training¹

All the following content comes from EASA AMC and includes the amendments coming from the Commission Implementing Regulation (EU) 2023/893 of 21 April 2023 amending Commission Regulation (EU) 2015/340 which was published in the Official Journal of the EU on 4 May 2023.

Number represents the level of taxonomy as for [AMC1 ATCO.D.010\(a\) \(a\)\(2\)\(i\) Composition of initial training](#).

The term “National” when used in the composition document should be understood as meaning both civil and military.

Mandatory content should be understood as training content provided in all Member States.

Optional content should be understood as content that might be omitted in Member States where this is not applicable.

Military ATCO Initial Aerodrome Control Rating training should contain the following subjects, topics, subtopics and training objectives using as baseline the subjects, topics and subtopics contained in Appendix 3 to Annex I of amended Commission Regulation (EU) 2015/340 — Aerodrome Control Rating training. This might indeed facilitate the potential latter conversion of Military ATCO licences into Civil Student ATCO licences.

The taxonomy of some of the training objectives identified in AMC1 ATCO.D.010(a)(2)(i) to Commission Regulation (EU) 2015/340 have been highlighted in **bright green** where they required to be adapted to the working requirements and needs of Military ATCOs.

Additional topics, subtopics and training objectives have also been identified and included **in bright yellow** in the Initial ADC Rating Training content to take into account the specific training requirements of Military ATCOs.

The composition of the Military ATCO Initial ADC Rating Training as presented in this document are the minimum requirements recommended to be implemented by interested military ATCO training organisations. Any Member State might decide to train its military ATCOs giving one or several of the training objectives a higher level of importance hence a higher taxonomy level.

Despite the fact that this document is legally non-binding, in order to achieve standardisation in the initial training of Military ATCOs, Member States which decide to implement it should apply its content as proposed.

¹ Page 449 of Easy Access Rules dated March 2024

SUBJECT 1: INTRODUCTION TO THE COURSE

TOPIC INTR 1 — COURSE MANAGEMENT				
Subtopic INTR 1.1 — Course introduction				
ADC INTR 1.1.1	Explain the aims and main objectives of the course.	2		ALL
Subtopic INTR 1.2 — Course administration				
ADC INTR 1.2.1	State how the course is administered.	1		ALL
Subtopic INTR 1.3 — Study material and training documentation				
ADC INTR 1.3.1	Use appropriate documents and their sources for course studies.	3	<i>Optional content: training documentation, library, CBT library, web, learning management server</i>	ALL
ADC INTR 1.3.2	Integrate appropriate information into course studies.	4	Training documentation <i>Optional content: supplementary information, library</i>	ALL

TOPIC INTR 2 — INTRODUCTION TO THE ATC TRAINING COURSE				
Subtopic INTR 2.1 — Course content and organisation				
ADC INTR 2.1.1	State the different training methods used during the course.	1	Theoretical training, practical training, self-study, types of training events	ALL
ADC INTR 2.1.2	State the subjects covered by the course and their purpose.	1		ALL
ADC INTR 2.1.3	Describe the organisation of theoretical training.	2	<i>Optional content: course programme</i>	ALL
ADC INTR 2.1.4	Describe the organisation of practical training.	2	<i>Optional content: PTP, simulation, briefing, debriefing, course programme</i>	ALL
Subtopic INTR 2.2 — Training ethos				
ADC INTR 2.2.1	Recognise the feedback mechanisms available.	1	Training progress, assessment, briefing, debriefing, learner–instructor feedback, instructor–instructor feedback	ALL
Subtopic INTR 2.3 — Assessment process				
ADC INTR 2.3.1	Describe the assessment process.	2		ALL

ED Decision 2023/011/R

SUBJECT 2: AVIATION LAW

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC LAW 1 — ATCO LICENSING/CERTIFICATE OF COMPETENCE				
Subtopic LAW 1.1 — Privileges and conditions				
ADC LAW 1.1.1	Appreciate the conditions which shall be met to issue an Aerodrome Control rating.	3	Regulation (EU) 2015/340 ¹ <i>Optional content: national documents</i>	ADC
ADC LAW 1.1.2	Explain how to maintain and update professional knowledge and skills to retain competence in the operational environment.	2		ALL
ADC LAW 1.1.3	Explain the conditions for the suspension/revocation of an ATCO licence.	2	Regulation (EU) 2015/340, national military regulations and directives	ALL

TOPIC LAW 2 — RULES AND REGULATIONS				
Subtopic LAW 2.1 — Reports				
ADC LAW 2.1.1	Describe the functions of, and processes for, reporting.	2	Reporting culture, forms for mandatory and voluntary occurrence reporting, Regulation (EU) No 376/2014 ² , Regulation (EU) 2015/1018 ³ <i>Optional content: breach of regulations, watchbook/logbook, records, voluntary reporting, military specific reports.</i>	ALL
ADC LAW 2.1.2	Use forms for reporting.	3	Regulation (EU) No 376/2014, forms for mandatory and voluntary occurrence reporting <i>Optional content: routine air-reports, breach of regulations, watchbook/logbook, records, military specific reports.</i>	ALL
Subtopic LAW 2.2 — Airspace				
ADC LAW 2.2.1	Appreciate airspace classes and structure and their relevance to operations using the Aerodrome Control rating.	3		ADC
ADC LAW 2.2.2	Provide planning, coordination and control actions appropriate to the classification and structure of airspace.	4	Military requirements, areas of responsibility (e.g. SVFR, VFR night within a control zone CTR) <i>Optional content: Regulation (EU) No 923/2012⁴, international requirements,</i>	ALL

¹ Commission Regulation (EU) 2015/340 of 20 February 2015 laying down technical requirements and administrative procedures relating to air traffic controllers' licences and certificates pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, amending Commission Implementing Regulation (EU) No 923/2012 and repealing Commission Regulation (EU) No 805/2011 (OJ L 63, 6.3.2015, p. 1).

² Regulation (EU) No 376/2014 of the European Parliament and of the Council of 3 April 2014 on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007 (OJ L 122, 24.4.2014, p. 18).

³ Commission Implementing Regulation (EU) 2015/1018 of 29 June 2015 laying down a list classifying occurrences in civil aviation to be mandatorily reported according to Regulation (EU) No 376/2014 of the European Parliament and of the Council (OJ L 163, 30.6.2015, p. 1).

⁴ Commission Implementing Regulation (EU) No 923/2012 of 26 September 2012 laying down the common rules of the air and operational provisions regarding services and procedures in air navigation and amending Implementing Regulation (EU) No 1035/2011 and

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC LAW 2 — RULES AND REGULATIONS			
			<i>civil requirements, military requirements, areas of responsibility, sectorisation, national requirements</i>
ADC LAW 2.2.3	Appreciate responsibility for terrain clearance.	3	ALL

TOPIC LAW 3 — ATS SAFETY MANAGEMENT			
Subtopic LAW 3.1 — Feedback process			
ADC LAW 3.1.1	State the importance of controller contribution to the feedback process.	1	<i>Optional content: voluntary reporting</i> ALL
ADC LAW 3.1.2	Describe how reported occurrences are analysed.	2	<i>Optional content: Regulation (EU) No 376/2014, local procedures</i> ALL
ADC LAW 3.1.3	Name the means used to disseminate recommendations.	1	<i>Optional content: safety letters, safety boards web pages</i> ALL
ADC LAW 3.1.4	Appreciate the just culture concept.	3	Benefits, prerequisites, constraints <i>Optional content: Skybrary</i> ALL
Subtopic LAW 3.2 — Safety investigation			
ADC LAW 3.2.1	Describe the role and objectives of safety investigation in the improvement of safety.	2	ALL

ED Decision 2023/011/R

SUBJECT 3: AIR TRAFFIC MANAGEMENT

TOPIC ATM 1 — PROVISION OF SERVICES			
Subtopic ATM 1.1 — Aerodrome control service			
ADC ATM 1.1.1	Appreciate areas of responsibility.	3	Control zone, traffic circuit, manoeuvring area, movement area, vicinity <i>Optional content: ATZ</i> ADC
ADC ATM 1.1.2	Provide aerodrome control service.	4	Regulation (EU) No 923/2012, Regulation (EU) 2017/373¹, operating procedures for the simulated/training environment <i>Optional content: ICAO Annex 11</i> ADC
Subtopic ATM 1.2 — Flight information service (FIS)			

Regulations (EC) No 1265/2007, (EC) No 1794/2006, (EC) No 730/2006, (EC) No 1033/2006 and (EU) No 255/2010 (OJ L 281, 13.10.2012, p. 1).

¹ Commission Implementing Regulation (EU) 2017/373 of 1 March 2017 laying down common requirements for providers of air traffic management/air navigation services and other air traffic management network functions and their oversight, repealing Regulation (EC) No 482/2008, Implementing Regulations (EU) No 1034/2011, (EU) No 1035/2011 and (EU) 2016/1377 and amending Regulation (EU) No 677/2011 (OJ L 62, 8.3.2017, p. 1).

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 1 — PROVISION OF SERVICES				
ADC ATM 1.2.1	Describe the information that shall be passed on to aircraft by an aerodrome controller.	2	Regulation (EU) 2017/373 <i>Optional content: ICAO Doc 4444, National military regulations and directives</i>	ADC
ADC ATM 1.2.2	Provide FIS.	4	Regulation (EU) No 923/2012, Regulation (EU) 2017/373++ <i>Optional content: national documents</i>	ALL
ADC ATM 1.2.3	Issue appropriate information.	3	Regulation (EU) 2017/373, essential local traffic, traffic information <i>Optional content: National military regulations and directives</i>	ADC
ADC ATM 1.2.4	Appreciate the use of ATIS in the provision of FIS.	3	Regulation (EU) No 923/2012	ALL
Subtopic ATM 1.3 — Alerting service (ALRS)				
ADC ATM 1.3.1	Provide ALRS.	4	Regulation (EU) 2017/373, Regulation (EU) No 923/2012 <i>Optional content: national documents</i>	ALL
ADC ATM 1.3.2	Respond to distress and urgency messages and signals.	3	Regulation (EU) No 923/2012, ICAO Annex 10 <i>Optional content: EUROCONTROL Guidelines for Controller Training in the Handling of Unusual/Emergency Situations, ICAO Doc 4444, national documents</i>	ALL
Subtopic ATM 1.4 — ATS system capacity and air traffic flow management (ATFM)				
ADC ATM 1.4.1	Appreciate the impact of the ATS system capacity and air traffic flow management on the controller.	3	<i>Optional content: EUROCONTROL ATFCM Users Manual, slot management, slot allocation procedures, local implementation of ATFCM principles, etc.</i>	ADC
ADC ATM 1.4.2	Organise traffic to take account of flow management.	4	<i>Optional content: departure sequence</i>	ADC
ADC ATM 1.4.3	Inform the appropriate local ATFM unit or military unit of local factors affecting the ATS system capacity and air traffic flow management.	3	<i>Optional content: abnormal situations, decrease in sector capacity, limitations on systems and equipment, changes in workload/capacity, unusual meteorological conditions, relevant information: reported ground-based incidents, forest fire, smoke, oil pollution</i>	ADC

TOPIC ATM 2 — COMMUNICATION				
Subtopic ATM 2.1 — Effective communication				
ADC ATM 2.1.1	List the communication means between controllers.	1	<i>Optional content: electronic, written, verbal and non-verbal communication</i>	ALL
ADC ATM 2.1.2	Select the most suitable means of communication given the situation.	5		ALL
ADC ATM 2.1.3	Use approved phraseology.	3	Regulation (EU) No 923/2012, Doc 4444	ALL

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 2 — COMMUNICATION				
			<i>Optional content: published national/local language phraseology, NATO STANAGS</i>	
ADC ATM 2.1.4	Ensure effective communication.	4	Use of plain language when required, communication within the sector/working position, between the sectors/WPs/ATC units, readback/verification of readback	ALL
ADC ATM 2.1.5	Analyse examples of pilot-controller communication for effectiveness.	4	<i>Optional content: real-life recordings, situation in the simulator</i>	ALL

TOPIC ATM 3 — ATC CLEARANCES AND ATC INSTRUCTIONS				
Subtopic ATM 3.1 — ATC clearances				
ADC ATM 3.1.1	Issue appropriate ATC clearances.	3	Regulation (EU) No 923/2012, Regulation (EU) 2017/373, ICAO Doc 4444 <i>Optional content: ICAO Doc 4444, national documents</i>	ALL
ADC ATM 3.1.2	Integrate appropriate ATC clearances into the control service.	4		ALL
ADC ATM 3.1.3	Ensure that the agreed course of action is carried out.	4		ALL
Subtopic ATM 3.2 — ATC instructions				
ADC ATM 3.2.1	Issue appropriate ATC instructions.	3	Regulation (EU) No 923/2012, ICAO Doc 4444, Regulation (EU) 2017/373 <i>Optional content: ICAO Doc 4444, national documents</i>	ALL
ADC ATM 3.2.2	Integrate appropriate ATC instructions into the control service.	4		ALL
ADC ATM 3.2.3	Ensure that the agreed course of action is carried out.	4		ALL

TOPIC ATM 4 — COORDINATION				
Subtopic ATM 4.1 — Necessity for coordination				
ADC ATM 4.1.1	Identify the need for coordination.	3		ALL
Subtopic ATM 4.2 — Tools and methods for coordination				
ADC ATM 4.2.1	Use the available tools and methods for coordination.	3	<i>Optional content: electronic transfer of flight data, telephone, interphone, intercom, direct speech, radiotelephone (RTF), local agreements, automated system coordination, specific military tools</i>	ALL
Subtopic ATM 4.3 — Coordination procedures				
ADC ATM	Initiate appropriate coordination.	3	Delegation/transfer of responsibility for air-ground communications and	ALL

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 4 — COORDINATION				
4.3.1			separation, transfer of control, etc., Regulation (EU) 2017/373 <i>Optional content: release point</i>	
ADC ATM 4.3.2	Analyse the effect of coordination requested by an adjacent position/unit.	4	<i>Optional content: delegation/transfer of responsibility for air-ground communications and separation, release point, transfer of control, etc.</i>	ALL
ADC ATM 4.3.3	Select, after negotiation, an appropriate course of action.	5		ALL
ADC ATM 4.3.4	Ensure that the agreed course of action is carried out.	4		ALL
ADC ATM 4.3.5	Coordinate when providing FIS.	4	ICAO Doc 4444, Regulation (EU) 2017/373 <i>Optional content: ICAO Doc 4444</i>	ALL
ADC ATM 4.3.6	Coordinate when providing ALRS.	4	ICAO Doc 4444, Regulation (EU) 2017/373 <i>Optional content: ICAO Doc 4444</i>	ALL
ADC ATMMIL 4.3.7	Describe procedures of silent coordination	2		ALL

TOPIC ATM 5 — ALTIMETRY AND LEVEL ALLOCATION				
Subtopic ATM 5.1 — Altimetry				
ADC ATM 5.1.1	Allocate levels according to altimetry data.	4	Regulation (EU) No 923/2012	ALL
ADC ATM 5.1.2	Ensure separation according to altimetry data.	4	<i>Optional content: transition level, transition altitude, transition layer, height, flight level, altitude, vertical distance to airspace boundaries</i>	ALL
Subtopic ATM 5.2 — Terrain clearance				
ADC ATM 5.2.1	Provide planning, coordination and control actions appropriate to the rules for minimum safe height and terrain clearance.	4	<i>Optional content: terrain clearance dimensions, minimum safe altitudes, transition level, minimum flight level, minimum sector altitude</i>	ADC

TOPIC ATM 6 — SEPARATION				
Subtopic ATM 6.1 — Separation between departing aircraft				
ADC ATM 6.1.1	Provide separation between departing aircraft.	4	ICAO Doc 4444, Regulation (EU) 2017/373 military regulations and directives <i>Optional content: ICAO Doc 4444</i>	ADC
Subtopic ATM 6.2 — Separation of departing aircraft from arriving aircraft				
ADC ATM 6.2.1	Provide separation of departing aircraft from arriving aircraft.	4	ICAO Doc 4444, Regulation (EU) 2017/373 military regulations and directives	ADC
Subtopic ATM 6.3 — Separation of landing aircraft and preceding landing or departing aircraft				

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 6 — SEPARATION				
ADC ATM 6.3.1	Provide separation of landing aircraft and preceding landing or departing aircraft.	4	ICAO Doc 4444, Regulation (EU) 2017/373 military regulations and directives	ADC
Subtopic ATM 6.4 — Time-based wake turbulence longitudinal separation				
ADC ATM 6.4.1	Provide time-based wake turbulence longitudinal separation.	4	ICAO Doc 4444, Regulation (EU) 2017/373 Regulation (EU) No 923/2012	ADC
Subtopic ATM 6.5 — Reduced separation minima				
ADC ATM 6.5.1	Provide reduced separation minima.	4	ICAO Doc 4444, Regulation (EU) 2017/373 <i>Optional content: military regulations and directives</i>	ADC

TOPIC ATM 7 — AIRBORNE AND GROUND-BASED SAFETY NETS				
Subtopic ATM 7.1 — Airborne safety nets				
ADC ATM 7.1.1	Recognise the independence of ACAS thresholds and ATC separation standards.	2	ICAO Doc 9863 <i>Optional content: Skybrary Safety Nets</i>	ALL
ADC ATM 7.1.2	Describe the controller responsibility during and following an ACAS RA reported by the pilot.	2	Regulation (EU) No 923/2012 <i>Optional content: ICAO Doc 4444, ICAO Doc 9863, Skybrary Safety Nets</i>	ALL
ADC ATM 7.1.3	Respond to pilot notification of actions based on airborne systems warnings.	3	<i>Optional content: ACAS, Skybrary Safety Nets</i>	ADC
Subtopic ATM 7.2 — Ground-based safety nets				
ADC ATM 7.2.1	Respond to available ground-based safety nets' warnings.	3		ADC

TOPIC ATM 8 — DATA DISPLAY				
Subtopic ATM 8.1 — Data management				
ADC ATM 8.1.1	Update the data display to accurately reflect the traffic situation.	3	<i>Optional content: information displayed, strip-marking procedures, electronic information data displays, actions based on traffic display information, calculation of EETs</i>	ALL
ADC ATM 8.1.2	Analyse pertinent data on data displays.	4		ALL
ADC ATM 8.1.3	Organise pertinent data on data displays.	4		ALL
ADC ATM 8.1.4	Obtain flight plan information.	3	CPL, supplementary information <i>Optional content: FPL, AFIL, etc.</i>	ALL
ADC ATM 8.1.5	Use flight plan information.	3		ALL

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 9 — OPERATIONAL ENVIRONMENT (SIMULATED)				
Subtopic ATM 9.1 — Integrity of the operational environment				
ADC ATM 9.1.1	Obtain information concerning the operational environment.	3	<i>Optional content: local/simulator operation manuals, briefing, notices, current flight plan data/information displays, pilot reports, coordination, verification of information</i>	ALL
ADC ATM 9.1.2	Ensure the integrity of the operational environment.	4	<i>Optional content: frequency, VOLMET, ATIS, SIGMET, systems' set-up, integrity of displays</i>	ADC
Subtopic ATM 9.2 — Verification of the currency of operational procedures				
ADC ATM 9.2.1	Check all relevant documentation before managing traffic.	3	<i>Optional content: briefing, letters of agreement (LoAs), NOTAMs, AICs</i>	ALL
Subtopic ATM 9.3 — Handover–takeover				
ADC ATM 9.3.1	Transfer information to the relieving controller.	3		ALL
ADC ATM 9.3.2	Obtain information from the controller handing over.	3		ALL
ADC ATM 9.3.3	List possible actions to provide a safe position handover–takeover.	1	<i>Optional content: rigour, preparation, overlap time</i>	ALL
ADC ATM 9.3.4	Explain the consequences of a missed position handover–takeover process.	2		ALL

TOPIC ATM 10 — PROVISION OF AERODROME CONTROL SERVICE				
Subtopic ATM 10.1 — Responsibility for the provision				
ADC ATM 10.1.1	Explain the responsibility for the provision of aerodrome control service.	2	Regulation (EU) 2017/373, Regulation (EU) No 923/2012 <i>Optional content: ICAO Doc 4444</i>	ADC
ADC ATM 10.1.2	Describe the division of responsibility among air traffic control units.	2	Regulation (EU) 2017/373 <i>Optional content: ICAO Doc 4444</i>	ALL
ADC ATM 10.1.3	Describe the responsibility of civil ATCOs in regard to military traffic.	2	ICAO Doc 4444 <i>Optional content: ICAO Doc 9554</i>	ALL
ADC ATM 10.1.4	Describe the responsibility in regard to unmanned free balloons.	2	Regulation (EU) No 923/2012	ALL
ADC ATM 10.1.5	Appreciate the influence of operational requirements.	3	Military flying <i>Optional content: military flying, calibration flights, aerial photography</i>	ALL
Subtopic ATM 10.2 — Traffic management process				
ADC ATM 10.2.1	Ensure that situational awareness is maintained.	4	Information gathering, observation, traffic projection	ADC

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 10 — PROVISION OF AERODROME CONTROL SERVICE				
ADC ATM 10.2.2	Detect conflicts in time for appropriate resolution.	4		ALL
ADC ATM 10.2.3	Identify potential solutions to achieve a safe and effective flow of aerodrome traffic.	3		ADC
ADC ATM 10.2.4	Evaluate possible outcomes of different planning and control actions.	5		ALL
ADC ATM 10.2.5	Select an appropriate plan in time to achieve safe and effective flow of aerodrome traffic.	5		ADC
ADC ATM 10.2.6	Ensure the adequate prioritisation of actions.	4		ALL
ADC ATM 10.2.7	Execute the selected plan in a timely manner.	3		ALL
ADC ATM 10.2.8	Ensure that a safe and efficient outcome is achieved.	4	Traffic monitoring, adaptability and follow-up	ALL
Subtopic ATM 10.3 — Aeronautical ground lights				
ADC ATM 10.3.1	Select appropriate aeronautical ground lights.	5	Regulation (EU) 2017/373, ICAO Doc 4444, <i>Optional: special military procedures</i>	ADC
Subtopic ATM 10.4 — Information to aircraft by the aerodrome control tower				
ADC ATM 10.4.1	Provide information related to the operation of aircraft.	4	ICAO Doc 4444, Regulation (EU) 2017/373, Regulation (EU) No 255/2010	ADC
ADC ATM 10.4.2	Provide information on aerodrome conditions.	4	ICAO Doc 4444, Regulation (EU) No 923/2012, Regulation (EU) 2017/373 <i>Optional: national military regulations and directives</i>	ADC
Subtopic ATM 10.5 — Runway in use				
ADC ATM 10.5.1	Select the runway in use.	5	ICAO Doc 4444, Regulation (EU) 2017/373, Regulation (EU) No 923/2012 <i>Optional: national military procedures</i>	ADC
ADC ATM 10.5.2	Coordinate the runway in use.	4	<i>Optional content: approach control, area control, runway selection, change of runway</i>	ADC
ADC ATM 10.5.3	Manage traffic in the event of runway-in-use change.	4	<i>Optional content: Skybrary</i>	ADC
Subtopic ATM 10.6 — Control of aerodrome traffic				
ADC ATM 10.6.1	Predict positions of aircraft in the aerodrome traffic and taxi circuits.	4	ICAO Doc 4444, Regulation (EU) 2017/373	ADC
ADC ATM 10.6.2	Manage traffic on the manoeuvring area.	4	ICAO Doc 4444, Regulation (EU) 2017/373 Regulation (EU) No 923/2012 <i>Optional content: runway inspection</i>	ADC

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 10 — PROVISION OF AERODROME CONTROL SERVICE				
ADC ATM 10.6.3	Manage traffic in accordance with a change to operational procedures.	4	<i>Optional content: taxiway closure</i>	ADC
ADC ATM 10.6.4	Balance the workload against personal capacity.	5	<i>Optional content: replanning, prioritising solutions, denying requests, delaying traffic</i>	ADC
Subtopic ATM 10.7 — Control of airborne traffic				
ADC ATM 10.7.1	Manage traffic in the traffic circuit.	4	ICAO Doc 4444, Regulation (EU) 2017/373 Regulation (EU) No 923/2012, national military regulations and directives	ADC
ADC ATM 10.7.2	Integrate the change in the serviceability of radio aids in the management of aerodrome traffic.	4	<i>Optional content: limitations, availability and status of ground-based and satellite-based systems</i>	ADC
ADC ATM 10.7.3	Integrate surface conditions into the control of aerodrome traffic.	4	<i>Optional content: damp, wet, water patches, flooding, snow, slush, ice, braking performance</i>	ADC
ADC ATM 10.7.4	Integrate information about meteorological phenomena into the control of aerodrome traffic.	4	<i>Optional content: clouds, precipitation, visibility, wind, meteorological hazards</i>	ADC
ADC ATM 10.7.5	Integrate the information provided by situation displays.	4		ADC
ADC ATM 10.7.6	Issue missed approach or go-around instruction.	3	Regulation (EU) No 923/2012, Regulation (EU) 2027/373 <i>Optional content: obstructed runway</i>	ADC
Subtopic ATM 10.8 — Departing traffic				
ADC ATM 10.8.1	Manage departing aircraft.	4	ICAO Doc 4444, Regulation (EU) No 923/2012 Regulation (EU) 2017/373, use of situation displays, allocation of the order of priority, meteorological phenomena, environmental factors, wake turbulence, appropriate departure clearances, SIDs <i>Optional: national military regulations and directives</i>	ADC
ADC ATM 10.8.2	Integrate departure sequence into the control of aerodrome traffic.	4	ICAO Doc 4444, Regulation (EU) No 923/2012 Regulation (EU) 2017/373	ADC
ADC ATM 10.8.3	Provide appropriate information to departing traffic.	4	Regulation (EU) 2017/373 Regulation (EU) No 255/2010, use of situation displays, wake turbulence <i>Optional content: ICAO Doc 4444</i>	ADC
Subtopic ATM 10.9 — Arriving traffic				
ADC ATM 10.9.1	Manage arriving aircraft.	4	Regulation (EU) 2017/373, Regulation (EU) No 923/2012, use of situation displays, allocation of the order of priority, meteorological phenomena, environmental factors, wake turbulence <i>Optional content: ICAO Doc 4444, national military regulations and directives</i>	ADC

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ATM 10 — PROVISION OF AERODROME CONTROL SERVICE				
ADC ATM 10.9.2	Integrate the approach sequence into the control of aerodrome traffic.	4	Regulation (EU) 2017/373 Regulation (EU) No 923/2012 <i>Optional: ICAO Doc 4444</i>	ADC
ADC ATM 10.9.3	Integrate aircraft on visual approach into the aerodrome traffic.	4	Regulation (EU) 2017/373 Regulation (EU) No 923/2012 <i>Optional: ICAO Doc 4444</i>	ADC
ADC ATM 10.9.4	Integrate aircraft on missed approach into the aerodrome traffic.	4	<i>Optional: ICAO Doc 4444</i>	ADC
ADC ATM 10.9.5	Integrate aircraft performing circling approach into the aerodrome traffic.	4	ICAO Doc 8168 Volume II, ICAO Doc 4444	ADC
ADC ATM 10.9.6	Provide appropriate information to arriving aircraft.	4	Regulation (EU) 2017/373 Regulation (EU) No 923/2012 <i>Optional: ICAO Doc 4444</i>	ADC
Subtopic ATM 10.10 — Special VFR (SVFR) operations				
ADC ATM 10.10.1	Manage the suspension of VFR operations.	4	Regulation (EU) 2017/373 <i>Optional: ICAO Doc 4444</i>	ADC
ADC ATM 10.10.2	Manage SVFR traffic.	4	Regulation (EU) No 923/2012, Regulation (EU) 2017/373 <i>Optional: ICAO Doc 4444, national military regulations and directives</i>	ADC
Subtopic ATM 10.11 — Low-visibility operations				
ADC ATM 10.11.1	Describe the procedures for low-visibility operations.	3	Regulation (EU) 2017/373 <i>Optional: ICAO Doc 4444, national military regulations and directives</i>	ADC
Subtopic ATM 10.12 — Aerodrome control service with advanced system support				
ADC ATM 10.12.1	Appreciate the impact of advanced systems on the provision of aerodrome control service.		<i>Optional content: surface manager (SMAN), departure manager (DMAN), automated conflict/incursion tools, alarms and resolution advisory tools, automated assistance for surface movement planning and routing, enhanced vision technology in low visibility for controllers</i>	ADC

ED Decision 2023/011/R

SUBJECT 4: METEOROLOGY

TOPIC MET 1 — METEOROLOGICAL PHENOMENA				
Subtopic MET 1.1 — Meteorological phenomena				
ADC MET 1.1.1	Appreciate the impact of different cloud types.	3	Cumulonimbus <i>Optional content: stratus, nimbostratus, etc.</i>	ADC
ADC MET 1.1.2	Recognise different cloud types.	1		ADC

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC MET 1 — METEOROLOGICAL PHENOMENA				
ADC MET 1.1.3	Appreciate the impact of precipitation.	3	Precipitation and microphysics <i>Optional content: rain, snow, sleet, hail</i>	ADC
ADC MET 1.1.4	Appreciate the impact of atmospheric obscurity.	3	<i>Optional content: advection fog, radiation fog, mixing, evaporation, mist, drizzle</i>	ADC
ADC MET 1.1.5	Appreciate the effect and impact of wind.	3	Gusting, veering, backing <i>Optional content: land breezes, sea breezes, Föhn</i>	ADC
ADC MET 1.1.6	Appreciate the effect and danger of hazardous meteorological phenomena.	3	Wind shear, turbulence, thunderstorms, icing, microbursts	ADC
ADC MET 1.1.7	Appreciate the effect of a frontal system on aerodrome operations.	3		ADC
ADC MET 1.1.8	Integrate data about meteorological phenomena into the provision of ATS.	4	Clearances, instructions and transmitted information <i>Optional content: relevant meteorological phenomena</i>	ALL

TOPIC MET 2 — SOURCES OF METEOROLOGICAL DATA				
Subtopic MET 2.1 — Meteorological instruments				
ADC MET 2.1.1	Extract information from meteorological instruments.	3	<i>Optional content: anemometer, RVR indicator, cloud base indicator, ceilometer, barometer</i>	ADC
Subtopic MET 2.2 — Other sources of meteorological data				
ADC MET 2.2.1	Decode information from meteorological data displays.	3		ALL
ADC MET 2.2.2	Use appropriate communication tools and networks to obtain meteorological data.	3		ADC
ADC MET 2.2.3	Relay meteorological information.	3	ICAO Doc 4444, Regulation (EU) No 923/2012 <i>Optional content: flight information centre, adjacent ATS unit, ADS-C reports</i>	ALL

ED Decision 2023/011/R

SUBJECT 5: NAVIGATION

TOPIC NAV 1 — MAPS AND AERONAUTICAL CHARTS				
Subtopic NAV 1.1 — Maps and charts				
ADC NAV 1.1.1	Decode symbols and information displayed on aeronautical maps and charts.	3	Military maps and charts, Instrument approach charts, SID charts, aerodrome charts <i>Optional content: visual approach charts, military maps and charts</i>	ADC APP APS

Edition Number : 1.0	Edition Date : 03 July 2024	Status: Approved	Page 16/30
----------------------	-----------------------------	------------------	------------

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC NAV 1 — MAPS AND AERONAUTICAL CHARTS				
ADC NAV 1.1.2	Use relevant maps and charts.	3		ALL
TOPIC NAV 2 — INSTRUMENT NAVIGATION				
Subtopic NAV 2.1 — Navigational systems				
ADC NAV 2.1.1	Describe how the operational status of navigational systems may change.	2	<i>Optional content: VDF, NDB, VOR, DME, ILS, ABAS, SBAS, GBAS, RNP, TACAN</i>	ADC
ADC NAV 2.1.2	Appreciate the effect of a change on the operational status of navigational systems.	3	<i>Optional content: precision, limitations, status, degraded procedures</i>	ALL
ADC NAV 2.1.3	Decode operational status displays of navigational systems.	3	<i>Optional content: VDF, NDB, VOR, DME, ILS, and GBAS, TACAN</i>	ADC
Subtopic NAV 2.2 — Stabilised approach				
ADC NAV 2.2.1	Describe the concept of stabilised approach.	2	<i>Optional content: Skybrary</i>	ADC APP APS
ADC NAV 2.2.2	Appreciate the effect of late change of runway-in-use for landing aircraft.	3	Cockpit workload <i>Optional content: impact on vertical profile (CDO), FMS management, crew procedure briefing, missed approach, loss of situational awareness, etc.</i>	ADC
Subtopic NAV 2.3 — Instrument departures and arrivals				
ADC NAV 2.3.1	Describe relevant SIDs.	2		ADC
ADC NAV 2.3.2	Describe the types and phases of instrument approach procedures.	2	Regulation (EU) 2017/373, ICAO Annex 6 <i>Optional content: military procedures (e.g. formation flights)</i>	ADC APP APS
ADC NAV 2.3.3	Describe the relevant minima applicable for a precision/non-precision and visual approach.	2	<i>Optional content: Type A/B operations, CAT I/II/III criteria, LNAV, LNAV/VNAV, LPV, RNP AR APCH minima, GCA, PAR</i>	ADC APP APS
Subtopic NAV 2.4 — Satellite-based systems				
ADC NAV 2.4.1	State the different applications of satellite-based systems relevant for aerodrome operations.	1	<i>Optional content: LNAV, LNAV/VNAV, LPV, RNP minima, precision approach</i>	ADC
Subtopic NAV 2.5 — PBN applications				
ADC NAV 2.5.1	State future PBN developments.	1	A-RNP, RNP (AR) DEP <i>Optional content: RNP 3D, VNAV, 4D, TBO</i>	ALL

ED Decision 2023/011/R

SUBJECT 6: AIRCRAFT

Edition Number : 1.0	Edition Date : 03 July 2024	Status: Approved	Page 17/30
----------------------	-----------------------------	------------------	------------

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ACFT 1 — AIRCRAFT INSTRUMENTS				
Subtopic ACFT 1.1 — Aircraft instruments				
ADC ACFT 1.1.1	Integrate information from aircraft instruments provided by the pilot into the provision of ATS.	4		ALL
ADC ACFT 1.1.2	Explain the operation of aircraft radio equipment.	2	<i>Optional content: radios (number of), emergency radios</i>	ALL
ADC ACFT 1.1.3	Explain the operation of on-board surveillance equipment.	2	Transponders: equipment Mode A, Mode C, Mode S, ADS capability	ADC APS ACS

TOPIC ACFT 2 — AIRCRAFT CATEGORIES				
Subtopic ACFT 2.1 — Wake turbulence				
ADC ACFT 2.1.1	Explain the wake turbulence effect and associated hazards to succeeding aircraft.	2		ALL
ADC ACFT 2.1.2	Appreciate the techniques used to prevent hazards associated with wake turbulence to succeeding aircraft.	3		ALL
Subtopic ACFT 2.2 — Application of the ICAO approach categories				
ADC ACFT 2.2.1	Describe the use of the ICAO approach categories.	2	ICAO Doc 8168	ADC APP APS
ADC ACFT 2.2.2	Appreciate the effect of the ICAO approach categories on the traffic organisation.	3		ADC APP APS

TOPIC ACFT 3 — FACTORS AFFECTING AIRCRAFT PERFORMANCE				
Subtopic ACFT 3.1 — Take-off factors				
ADC ACFT 3.1.1	Integrate the influence of factors affecting aircraft on take-off.	4	<i>Optional content: runway conditions, runway slope, aerodrome elevation, wind, temperature, aircraft configuration, airframe contamination and aircraft mass</i>	ADC
Subtopic ACFT 3.2 — Climb factors				
ADC ACFT 3.2.1	Appreciate the influence of factors affecting aircraft during climb.	3	<i>Optional content: speed, mass, air density, wind and temperature</i>	ADC
Subtopic ACFT 3.3 — Final approach and landing factors				
ADC ACFT 3.3.1	Integrate the influence of factors affecting aircraft during final approach and landing.	4	<i>Optional content: wind, aircraft configuration, mass, meteorological conditions, runway conditions, runway slope, aerodrome elevation, specific military procedures</i>	ADC
Subtopic ACFT 3.4 — Economic factors				
ADC ACFT 3.4.1	Integrate consideration of economic factors affecting aircraft.	4	<i>Optional content: starting-up, taxiing, routing, departure sequence</i>	ADC
Subtopic ACFT 3.5 — Environmental factors				

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ACFT 3 — FACTORS AFFECTING AIRCRAFT PERFORMANCE				
ADC ACFT 3.5.1	Appreciate the performance restrictions due to environmental constraints.	3	<i>Optional content: noise-abatement procedures, minimum flight altitudes, bird strike hazard, specific military limitations</i>	ADC
Subtopic ACFTMIL 3.6 – Operational factors				
ADC ACFTMIL 3.6.1	Appreciate the performance restrictions due to operational factors.	3	<i>Supersonic</i>	ALL

TOPIC ACFT 4 — AIRCRAFT DATA				
Subtopic ACFT 4.1 — Recognition of aircraft types				
ADC ACFT 4.1.1	Characterise a representative sample of aircraft which will be encountered in the operational/working environment.	2	Recognition, ICAO type designators, wake turbulence categories, NATO publications <i>Optional content: ICAO approach categories</i>	ADC
Subtopic ACFT 4.2 — Performance data				
ADC ACFT 4.2.1	Integrate the average performance data of a representative sample of aircraft which will be encountered in the operational/ working environment into the provision of control service.	4	Performance data under a representative variety of circumstances	ALL

ED Decision 2023/011/R

SUBJECT 7: HUMAN FACTORS

TOPIC HUM 1 — INFORMATION PROCESSING				
Subtopic HUM 1.1 — Cognition and factors influencing it				
ADC HUM 1.1.1	Describe the human information-processing model.	2	Attention, perception, memory, situational awareness, decision-making, response	ALL
ADC HUM 1.1.2	Describe the factors which influence human information-processing.	2	Confidence, stress, learning, knowledge, experience, fatigue, alcohol/drugs, distraction, interpersonal relations	ALL
Subtopic HUM 1.2 — Situational awareness				
ADC HUM 1.2.1	Appreciate the effect of human information-processing factors on situational awareness.	3	<i>Optional content: workload, knowledge, interpersonal relations, distraction, confidence, experience, fatigue, stress</i>	ALL
Subtopic HUM 1.3 — Decision-making				
ADC HUM 1.3.1	Appreciate the effect of human information-processing factors on decision-making.		<i>Optional content: workload, stress, interpersonal relations, distraction, confidence</i>	ALL
TOPIC HUM 2 — FACTORS AFFECTING HEALTH AND WELL-BEING				
Subtopic HUM 2.1 — Fatigue				
ADC HUM	Describe the onset of fatigue.	2	Regulation (EU) 2017/373	ALL

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC HUM 2 — FACTORS AFFECTING HEALTH AND WELL-BEING			
2.1.1			<i>Optional content: lack of concentration, listlessness, irritability, frustration, Skybrary Human Behaviour: EUROCONTROL Fatigue and sleep management</i>
ADC HUM 2.1.2	Recognise the onset of fatigue in self and in others.	1	<i>Optional content: Skybrary Human Behaviour: EUROCONTROL Fatigue and sleep management</i>
ADI (TWR) HUM 2.1.3	Describe the appropriate action when recognising fatigue.	2	<i>Optional content: Skybrary Human Behaviour: EUROCONTROL Fatigue and sleep management</i>
Subtopic HUM 2.2 — Stress			
ADC HUM 2.2.1	Recognise the effects of stress on human performance.	1	Stress and its symptoms in self and in others <i>Optional content: Regulation (EU) 2017/373</i>
ADC HUM 2.2.2	Describe the appropriate action when recognising stress.	2	
ADC HUM 2.2.3	Act to reduce stress.	3	
ADC HUM 2.2.4	Respond to stressful situations by offering, asking for or accepting assistance.	3	
ADC HUM 2.2.5	Recognise the effects of stressful events.	1	Self and others, abnormal situations

TOPIC HUM 3 — THREAT AND ERROR MANAGEMENT			
Subtopic HUM 3.1 — Threat and error management framework			
ADC HUM 3.1.1	Explain the importance of threat and error management.	2	<i>Optional content: prevention of incidents, safety improvement, revision of procedures and/or working practices</i>
ADC HUM 3.1.2	Explain the threat and error management framework.	2	Threats, errors, undesired states, countermeasures <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>
ADC HUM 3.1.3	Differentiate between the different types of threats in ATC.	2	Internal, external, airborne, environmental <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>
ADC HUM 3.1.4	Differentiate between the different types of errors in ATC.	2	Equipment, procedural, communication <i>Optional content: Increase in traffic, changes in procedures, complexities of systems or traffic, weather, unusual occurrences</i>

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC HUM 3 — THREAT AND ERROR MANAGEMENT				
ADC HUM 3.1.5	Differentiate between the different types of undesired states.	2	On the ground, airborne <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>	ALL
ADC HUM 3.1.6	Analyse examples of threat and error management in ATC.	4	Case studies <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>	ALL
Subtopic HUM 3.2 — Application of threat and error management				
ADC HUM 3.2.1	Manage threats.	4	Detect and respond <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>	ALL
ADC HUM 3.2.2	Manage errors.	4	Detect and respond <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>	ALL
ADC HUM 3.2.3	Manage undesired states.	4	Detect and respond <i>Optional content: ICAO Circular 314 — AN/178 Threat and Error Management (TEM) in Air Traffic Control</i>	ALL

TOPIC HUM 4 — TEAMWORK				
Subtopic HUM 4.1 — Benefits of teamwork				
ADC HUM 4.1.1	State the benefits of teamwork.	1	Increased safety, efficiency and capacity	ALL
ADC HUM 4.1.2	List the controller's human performance elements affected by teamwork.	1	Situational awareness, communication, decision-making, threat and error management, workload management	ALL
Subtopic HUM 4.2 — Conflict management				
ADC HUM 4.2.1	Identify the reasons for conflict.	3		ALL
ADC HUM 4.2.2	Describe strategies to cope with human conflicts.	2	<i>Optional content: in your team, in the simulator</i>	ALL
ADC HUM 4.2.3	Describe actions to prevent human conflicts.	2		ALL

TOPIC HUM 5 — SYSTEMS				
Subtopic HUM 5.1 — Concept of systems in ATM/ANS				
ADC HUM 5.1.1	Explain the concept of systems.	2	People; procedures; equipment; ATM in system terms: simple, complicated, and complex systems; system thinking	ALL
ADC HUM 5.1.2	Describe how changes in one part of a system may impact the other parts.	2		ALL

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC HUM 5 — SYSTEMS			
ADC HUM 5.1.3	Describe the role of the human in the system.	2	ALL

TOPIC HUM 6 — COMMUNICATION			
Subtopic HUM 6.1 — Effective communication			
ADC HUM 6.1.1	Explain effective communication in ATC operations.	2	ICAO Doc 9868 ALL
ADC HUM 6.1.2	Explain key strategies used to enable open communication.	2	<i>Optional content: active listening, active speaking, assertiveness, honesty, relevance, facts, neutrality</i> ALL
ADC HUM 6.1.3	Describe the parameters affecting the controller's competence to communicate effectively.	2	<i>Workload, mutual knowledge, controller versus pilot mental picture, distractions, sound, human conflicts</i> <i>Optional content: communication between and within the team(s), in the simulator, with the pilots, instructors, coordination partners</i> ALL
Subtopic HUM 6.2 — Effective feedback			
ADC HUM 6.2.1	Define feedback.	1	ALL
ADC HUM 6.2.2	Explain the purpose of receiving and giving feedback, and its effect on performance.	2	ALL
ADC HUM 6.2.3	Consider the impact of communication styles on feedback and on conflict resolution.	2	ALL
ADC HUM 6.2.4	Integrate feedback into performance.	4	ALL

ED Decision 2023/011/R

SUBJECT 8: EQUIPMENT AND SYSTEMS

TOPIC EQPS 1 — VOICE COMMUNICATIONS			
Subtopic EQPS 1.1 — Radio communications			
ADC EQPS 1.1.1	Operate two-way communication equipment.	3	<i>Transmit/receive switches, procedures</i> <i>Optional content: frequency selection, standby equipment</i> ALL
ADC EQPS 1.1.2	Identify indications of operational status of radio equipment.	3	<i>Optional content: indicator lights, serviceability displays, selector/frequency displays, encrypted radio frequency</i> ALL
Subtopic EQPS 1.2 — Other voice communications			
ADC EQPS	Operate landline communications.	3	<i>Optional content: telephone, interphone and intercom equipment</i> ALL

Edition Number : 1.0	Edition Date : 03 July 2024	Status: Approved	Page 22/30
----------------------	-----------------------------	------------------	------------

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC EQPS 1 — VOICE COMMUNICATIONS			
1.2.1			

TOPIC EQPS 2 — AUTOMATION IN ATS			
Subtopic EQPS 2.1 — Aeronautical fixed telecommunication network (AFTN)			
ADC EQPS 2.1.1	Decode AFTN messages.	3	Optional content: movement and control messages, NOTAMs, SNOWTAMs, BIRDTAMs, etc.
Subtopic EQPS 2.2 — Automatic data interchange			
ADC EQPS 2.2.1	Use automatic data transfer equipment where available.	3	Optional content: sequencing systems, automated information and coordination, OLDI
ADC EQPS 2.2.2	Explain operational application of CPDLC for departure clearance (DCL) delivery and D-ATIS.	2	ICAO Doc 9694

TOPIC EQPS 3 — CONTROLLER WORKING POSITION			
Subtopic EQPS 3.1 — Operation and monitoring of equipment			
ADC EQPS 3.1.1	Monitor the technical integrity of the controller working position.	3	Notification procedures, responsibilities
ADC EQPS 3.1.2	Operate the equipment of the controller working position.	3	Optional content: situation displays, flight progress board, flight data display, radio, telephone, maps and charts, strip-printer, clock, information systems, UDF/VDF
ADC EQPS 3.1.3	Operate the available equipment in abnormal and emergency situations.	3	
Subtopic EQPS 3.2 — Situation displays and information systems			
ADC EQPS 3.2.1	Use situation displays.	3	
ADC EQPS 3.2.2	Check the availability of information.	3	
ADC EQPS 3.2.3	Obtain information from equipment.	3	Optional content: information from wind direction indicator
ADC EQPS 3.2.4	Take account of anti-incursion equipment.	2	
ADC EQPS 3.2.5	Explain the use of ASMGCS.	2	
Subtopic EQPS 3.3 — Flight data systems			
ADC EQPS 3.3.1	Use the flight data information at the controller working position.	3	

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC EQPS 4 — FUTURE EQUIPMENT				
Subtopic EQPS 4.1 — New developments				
ADC EQPS 4.1.1	Recognise future developments.	1	New advanced systems <i>Optional content: European ATM Master Plan, European Plan for Aviation Safety</i>	ALL
TOPIC EQPS 5 — EQUIPMENT AND SYSTEMS' LIMITATIONS AND DEGRADATION				
Subtopic EQPS 5.1 — Reaction to limitations				
ADC EQPS 5.1.1	Take account of the limitations of equipment and systems.	2		ALL
ADC EQPS 5.1.2	Respond to technical deficiencies of the operational position.	3	Notification procedures, responsibilities	ALL
Subtopic EQPS 5.2 — Communication equipment degradation				
ADC EQPS 5.2.1	Identify that communication equipment has degraded.	3	<i>Optional content: ground–air, ground–ground and landline communications</i>	
ADC EQPS 5.2.2	Apply contingency procedures in the event of communication equipment degradation.	4	<i>Optional content: total or partial degradation of ground–air and landline communications; alternative methods of transferring data</i>	ALL
Subtopic EQPS 5.3 — Navigational equipment degradation				
ADC EQPS 5.3.1	Identify when a navigational equipment failure will affect operational ability.	3	<i>Optional content: navigational aids, 'European GNSS Contingency/Reversion Handbook for PBN Operations'</i>	ALL
ADC EQPS 5.3.2	Apply contingency procedures in the event of a navigational equipment degradation.	3	<i>Optional content: vertical separation, information to aircraft, navigational assistance, seeking assistance from adjacent units</i>	ALL

ED Decision 2023/011/R

SUBJECT 9: PROFESSIONAL ENVIRONMENT

TOPIC PEN 1 — FAMILIARISATION				
Subtopic PEN 1.1 — Study visit to an aerodrome				
ADC PEN 1.1.1	Appreciate the functions and provision of operational aerodrome control services.	3	Study visit to a TWR	ADC
TOPIC PEN 2 — AIRSPACE USERS				
Subtopic PEN 2.1 — Contributors to civil ATS operations				
ADC PEN 2.1.1	Characterise civil ATS activities at an aerodrome.	2	Study visit to a TWR <i>Optional content: familiarisation visits to TWR, APP, ACC, AIS, RCC</i>	ADC
ADC PEN	Characterise other parties interfacing with ATS operations.	2	<i>Optional content: familiarisation visits to engineering services, firefighting and</i>	ALL
Edition Number : 1.0		Edition Date : 03 July 2024		Status: Approved
			Page 24/30	

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC PEN 2 — AIRSPACE USERS				
2.1.2			<i>emergency services, airline operations offices</i>	
Subtopic PEN 2.2 — Contributors to military ATS operations				
ADC PEN 2.2.1	Characterise military ATS activities.	2	Optional content: familiarisation visits to TWR, APP, ACC, AIS, RCC, air defence units	ALL

TOPIC PEN 3 — CUSTOMER RELATIONS				
Subtopic PEN 3.1 — Provision of services and user requirements				
ADC PEN 3.1.1	Appreciate the role of an air navigation service provider.	3	Regulation (EU) 2018/1139 ¹	ALL
ADC PEN 3.1.2	Appreciate ATS users' requirements.	3		ALL

TOPIC PEN 4 — ENVIRONMENTAL PROTECTION				
Subtopic PEN 4.1 — Environmental protection				
ADC PEN 4.1.1	Describe the environmental constraints on aerodrome operations.	2	Optional content: ICAO Doc 10013 — Operational opportunities to reduce fuel burn and emissions, Hot Cargo Parking	ADC APP APS
ADC PEN 4.1.2	Define explain the use of the Collaborative Environmental Management (CEM) process at aerodromes.	2 1	Optional content: European ATM Master Plan, EUROCONTROL CEM Specification	ADC APP APS
ADC PEN 4.1.3	Appreciate the mitigation techniques used at aerodromes to minimise aviation's impact on the environment.	3	Optional content: noise-abatement procedures, noise preferential routes, flight efficiency	ADC APP

ED Decision 2023/011/R

SUBJECT 10: ABNORMAL AND EMERGENCY SITUATIONS

TOPIC ABES 1 — ABNORMAL AND EMERGENCY SITUATIONS (ABES)				
Subtopic ABES 1.1 — Overview of ABES				
ADC ABES 1.1.1	List common abnormal and emergency situations.	1	Military abnormal and emergency situations (e.g. use of aircraft arresting systems, flame out procedures) Optional content: EATM Guidelines for Controller Training in the Handling of Unusual/Emergency Situations, ambulance flights, ground-based safety nets alerts, airframe failure, unreliable	ALL

¹ Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91.

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ABES 1 — ABNORMAL AND EMERGENCY SITUATIONS (ABES)				
			<i>instruments, runway incursion, GNSS failure</i>	
ADC ABES 1.1.2	Identify potential or actual abnormal and emergency situations.	3		ALL
ADC ABES 1.1.3	Take into account the procedures for given abnormal and emergency situations.	2	ICAO Doc 4444, Bird strike, aborted take-off, Military procedures <i>Optional content: ICAO Doc 4444</i>	ADC
ADC ABES 1.1.4	Take into account that procedures do not exist for all abnormal and emergency situations.	2	<i>Optional content: real-life examples</i>	ALL
ADC ABES 1.1.5	Consider how the evolution of a situation may have an impact on safety.	2	<i>Optional content: separation, information, coordination</i>	ALL

TOPIC ABES 2 — SKILLS IMPROVEMENT				
Subtopic ABES 2.1 — Communication effectiveness				
ADC ABES 2.1.1	Ensure effective communication in all circumstances including the case where standard phraseology is not applicable.	4	Phraseology, vocabulary, readback, radio silence instruction	ALL
ADC ABES 2.1.2	Apply change of radiotelephony call sign.	3	ICAO Doc 4444, Regulation (EU) No 923/2012 <i>Optional content: ICAO Doc 4444</i>	ALL
Subtopic ABES 2.2 — Avoidance of mental overload				
ADC ABES 2.2.1	Describe actions to keep the situation under control.	2	<i>Optional content: sector-splitting, holding, flow management, task delegation</i>	ALL
ADC ABES 2.2.2	Organise priority of actions.	4		ALL
ADC ABES 2.2.3	Ensure the effective dissemination of information.	4	<i>Optional content: between executive and planner/coordinator, with the supervisor, between sectors, between ACC, APP and TWR and air defence units, with ground staff, etc.</i>	ALL
ADC ABES 2.2.4	Consider asking for help.	2		ALL
Subtopic ABES 2.3 — Air-ground cooperation				
ADC ABES 2.3.1	Collect appropriate information relevant to the situation.	3		ALL
ADC ABES 2.3.2	Assist the pilot.	3	Pilot workload <i>Optional content: instructions, information, support, human factors, etc.</i>	ALL

TOPIC ABES 3 — PROCEDURES FOR ABNORMAL AND EMERGENCY SITUATIONS (ABES)				
Subtopic ABES 3.1 — Application of procedures for ABES				

Edition Number : 1.0	Edition Date : 03 July 2024	Status: Approved	Page 26/30
----------------------	-----------------------------	------------------	------------

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC ABES 3 — PROCEDURES FOR ABNORMAL AND EMERGENCY SITUATIONS (ABES)				
ADC ABES 3.1.1	Apply the procedures for given abnormal and emergency situations.	3	Military abnormal and emergency situations (e.g. use of aircraft arresting systems, flame out procedures) <i>Optional content: EATM Guidelines for Controller Training in the Handling of Unusual/Emergency Situations, ambulance flights, ground-based safety nets alerts, airframe failure</i>	ALL
Subtopic ABES 3.2 — Radio failure				
ADC ABES 3.2.1	Describe the procedures to be followed by a pilot when experiencing complete or partial radio failure.	2	ICAO Doc 4444, Regulation (EU) No 923/2012, military procedures <i>Optional content: ICAO Doc 4444, military procedures, simulator operation procedures</i>	ALL
ADC ABES 3.2.2	Apply the procedures to be followed when a pilot experiences complete or partial radio failure.	3	Regulation (EU) No 923/2012, military procedures <i>Optional content: prolonged loss of communication</i>	ALL
Subtopic ABES 3.3 — Unlawful interference and aircraft bomb threat				
ADC ABES 3.3.1	Apply ATC procedures associated with unlawful interference and aircraft bomb threat.	3	Regulation (EU) No 923/2012, military procedures <i>Optional content: simulator operation procedures</i>	ALL
Subtopic ABES 3.4 — Strayed or unidentified aircraft				
ADC ABES 3.4.1	Apply the procedures for strayed aircraft.	3	Regulation (EU) No 923/2012 <i>Optional content: inside controlled airspace, outside controlled airspace</i>	ALL
ADC ABES 3.4.2	Apply the procedures for unidentified aircraft.	3	Regulation (EU) No 923/2012, military procedures	ALL
ADC ABES 3.4.3	Provide navigational assistance to aircraft.	4	Military procedures <i>Optional content: diverted aircraft, aircraft lost or unsure of position, information derived locally or from radar service or from other pilots, nearest most suitable aerodrome, track, heading, distance, aerodrome information, any other relevant navigational assistance, ICAO Doc 4444, etc.</i>	ADC
Subtopic ABES 3.5 — Runway incursion				
ADC ABES 3.5.1	Apply ATC procedures associated with runway incursion.	3	ICAO Doc 4444, Regulation (EU) 2017/373 <i>Optional content: ICAO Doc 4444</i>	ADC
ABES 3.6 — Interception of civil aircraft				
ADC ABES 3.6.1	Explain the procedures in the event of interception of civil aircraft.	2	Military procedures Regulation (EU) No 923/2012	ALL
ABESMIL 3.7 – QRA procedures				
ADC ABESMIL 3.7.1	Apply the procedures in the event of interception of any aircraft.	3	Military procedures	ALL

SUBJECT 11: AERODROMES

TOPIC AGA 1 — AERODROME DATA, LAYOUT AND COORDINATION				
Subtopic AGA 1.1 — Definitions				
ADC AGA 1.1.1	Define aerodrome data.	1	ICAO Annex 14, Regulation (EU) No 139/2014 ¹ , military publications <i>Optional content: aerodrome elevation, reference point, apron, movement area, manoeuvring area, hotspot</i>	ADC APP APS
Subtopic AGA 1.2 — Coordination				
ADC AGA 1.2.1	Identify the information that has to be exchanged between ATS and the aerodrome authority.	3	Aerodrome conditions, fire/rescue category, condition of ground equipment and NAVAIDs, AIRAC, Regulation (EU) No 139/2014, military publications, ICAO Annex 14	ADC APP APS
TOPIC AGA 2 — MOVEMENT AREA				
Subtopic AGA 2.1 — Movement area				
ADC AGA 2.1.1	Describe the movement area.	2	ICAO Annex 14, Regulation (EU) No 139/2014, Arming areas	ADC APP APS
ADC AGA 2.1.2	Describe the marking of obstacles and unusable or unserviceable areas.	2	Flags, signs on pavement, lights	ADC APP APS
ADC AGA 2.1.3	Identify the information on conditions of the movement area that has to be passed on to aircraft.	3	Essential information on aerodrome conditions	ADC APP APS
Subtopic AGA 2.2 — Manoeuvring area				
ADC AGA 2.2.1	Describe the manoeuvring area.	2	ICAO Annex 14, Regulation (EU) No 139/2014, military publications	ADC APP APS
ADC AGA 2.2.2	Describe the taxiway.	2	Military publications	ADC APP APS
ADC AGA 2.2.3	Describe the daylight marking on taxiways.	2		ADC APP APS
ADC AGA 2.2.4	Describe taxiway lighting.	2		ADC APP APS
Subtopic AGA 2.3 — Runways				

¹ Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 44, 14.2.2014, p. 1).

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC AGA 2 — MOVEMENT AREA				
ADC AGA 2.3.1	Describe the runway.	2	Runway, runway surface, runway strip, runway shoulder, runway-end safety areas, clearways, stopways, military marking requirements	ADC APP APS
ADC AGA 2.3.2	Describe the instrument runway.	2	ICAO Annex 14 , Regulation (EU) No 139/2014	ADC APP APS
ADC AGA 2.3.3	Describe the non-instrument runway.	2	ICAO Annex 14 , Regulation (EU) No 139/2014	ADC APP APS
ADC AGA 2.3.4	Explain runway declared distances.	2	TORA, TODA, ASDA, LDA	ADC APP APS
ADC AGA 2.3.5	Explain the differences between ACN and PCN.	2	Strength of pavements	ADC APP APS
ADC AGA 2.3.6	Describe the daylight markings on runways.	2	<i>Optional content: runway designator, centre line, threshold, aiming point, fixed distance, touchdown zone, side strip, colour</i>	ADC APP APS
ADC AGA 2.3.7	Describe runway lights.	2	<i>Optional content: colour, centre line, intensity, edge, touchdown zone, threshold, barettes</i>	ADC APP APS
ADC AGA 2.3.8	Explain the functions of visual landing aids.	2	<i>Optional content: AVASI, VASI, PAPI</i>	ADC APP APS
ADC AGA 2.3.9	Describe the approach lighting systems.	2	Centre line, cross bars, stroboscopic lights, colours, intensity and brightness	ADC APP APS
ADC AGA 2.3.10	Characterise the effect of water/ice on runways.	2		ADC APP APS
ADC AGA 2.3.11	Explain braking performance and methods of reporting it.	2		ADC APP APS
ADC AGA 2.3.12	Explain the effect of runway visual range on aerodrome operations.	2		ADC APP APS
Subtopic AGAMIL 2.4 — Aircraft arresting systems				
ADC AGAMIL 2.4.1	Describe the available aircraft arresting systems and related markings	2		ALL

TOPIC AGA 3 — OBSTACLES				
Subtopic AGA 3.1 — Obstacle-free airspace around aerodromes				
ADC AGA 3.1.1	Explain the necessity for establishing and maintaining airspace around aerodromes obstacle free.	2		ADC APP APS

MILITARY AIR TRAFFIC CONTROLLER INITIAL TRAINING - ADC COMPOSITION

TOPIC AGA 3 — OBSTACLES				
ADC AGA 3.1.2	Explain the necessity for establishing and maintaining protection zones	2	Avoid interferences with navigational systems, PAR	ADC

TOPIC AGA 4 — MISCELLANEOUS EQUIPMENT				
Subtopic AGA 4.1 — Location				
ADC AGA 4.1.1	Explain the location of miscellaneous aerodrome ground equipment.	2	<i>Optional content: LOC, GP, VDF, radio communication or ATS surveillance systems sensors, stopbars, AVASI, VASI, PAPI, specific military equipment (e.g. TACAN, GCA Antennas)</i>	ADC APP APS