



EESTI LENNUAKADEEMIA

Õppematerjalide ajakohasuse protokoll 2025/2026 õppeaasta

Õppematerjal on vastavuses Eesti Lennuakadeemia õppeprogrammile (MTOE 4.2.0, 4.2.1, 4.2.2, 4.2.3), Euroopa Komisjoni regulatsiooni Osa-66 liitega I.

Mooduli nr: Moodul 7

Õppematerjali nimetus: INTERNATIONAL CENTRE FOR AEROSPACE TRAINING (ICAT)
MODULE 7 - MAINTENANCE PRACTICES

Lisainfo:

- International Centre for Aerospace Training (ICAT) paber kandjal ja e-raamatuna (A, B1, B2 kategooria)
- TÄIENDAV ÕPPEMATERJAL MOODLE KESKKONNAS

Õppematerjali pealkiri: INTERNATIONAL CENTRE FOR AEROSPACE TRAINING (ICAT)
MODULE 7 - MAINTENANCE PRACTICES

Revisjoni number: 2 (EU2025/111 kohane uuendus)

Kasutusperiood: 12.veebruar 2026 – 30. september 2026

Heaks kiidetud veebikeskkond distantsõppe
läbiviimiseks

Zoom (<https://zoom.us/>)

Google Classroom (classroom.google.com)

Protokolli koostamise kuupäev: 12.02.2026

MTO koolitusjuht: Madis Parv
(allkirjastatud digitaalselt)

ÕPPEMATERJALI VASTAVUSHINDAMISE KONTROLL-LEHT

Mooduli nr. ja nimetus: Module 7 Maintenance Practices	Tase			Õppematerjali vastavus Osa-66 Lisa III mooduli programmile
	A	B1	B2	
7.1 Safety Precautions–Aircraft and Workshop <i>Aspects of safe working practices including precautions to be taken when working with electricity, gases (especially oxygen), oils, and chemicals. Fuel tank safety and fuel tank entry procedures and precautions. Awareness and precautions regarding aircraft equipped with ballistic recovery systems. Also, instructions for the remedial action to be taken in the event of a fire or another accident with one or more of these hazards, including information on fire-extinguishing agents.</i>	3	3	3	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta MÄRKUS: Alateema <i>Fuel tank safety and fuel tank entry procedures and precautions. Awareness and precautions regarding aircraft equipped with ballistic recovery systems</i> õppematerjal Moodle keskkonnas
7.2 Workshop Practices <i>Care of tools, control of tools, use of workshop materials; Dimensions, allowances and tolerances, workmanship standards; Calibration of tools and equipment, calibration standards.</i>	3	3	3	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.3 Tools <i>Common hand-tool types; Common power-tool types; Operation and use of precision-measuring tools; Lubrication equipment and methods; Operation, function, and use of electrical general test equipment.</i>	3	3	3	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.4 Potential safety hazards when working with electrical systems and protective equipment <i>Electric shock hazards and effects of current on the human body Arc flash, arc blast, and stored energy hazards (capacitors, batteries, power electronics) Battery-related hazards: chemical, thermal runaway, fire and explosion risks Electrostatic discharge (ESD) and electromagnetic hazards Environmental and situational risks (wet conditions, confined spaces, poor accessibility) Protective measures: personal protective equipment (PPE), insulated tools, system isolation and verification of absence of voltage</i>	3	3	3	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta MÄRKUS: Alateema <i>Potential safety hazards when working with electrical systems and protective equipment</i> õppematerjal Moodle keskkonnas
7.5 Engineering Drawings, Diagrams and Standards <i>Drawing types and diagrams, their symbols, dimensions, tolerances and projections; Identification of title block information; Microfilm, microfiche, and computerised presentations; Specification 100 of the Air Transport Association (ATA) of America; Aeronautical and other applicable standards including ISO, AN, MS, NAS and MIL;</i>	1	2	2	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta

<i>Wiring diagrams and schematic diagrams.</i>				
7.6 Fits and Clearances <i>Drill sizes for bolt holes, classes of fits; Common system for fits and clearances; Schedule of fits and clearances for aircraft and engines; Limits for bow, twist and wear; Standard methods for checking shafts, bearings, and other parts.</i>	1	2	1	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.7 Electrical Wiring Interconnection System (EWIS) <i>Continuity, insulation and bonding techniques and testing; Use of crimp tools: hand and hydraulic operated; Testing of crimp joints; Connector pin removal and insertion; Coaxial cables: testing and installation precautions; Identification of wire types, their inspection criteria and damage tolerance; Wiring protection techniques: cable looming and loom support, cable clamps, protective sleeving techniques including heat shrink wrapping, shielding; High-Intensity Radiated Fields (HIRF) and protection principles; Soldering of electrical wires, EWIS installations, inspection, repair, maintenance, and cleanliness standards.</i>	1	3	3	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta MÄRKUS: Täiendav õppematerjal Moodle keskkonnas
7.8 Riveting <i>Riveted joints, rivet spacing and pitch; Tools used for riveting and dimpling; Inspection of riveted joints.</i>	1	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.9 Pipes and Hoses <i>Bending and belling/flaring aircraft pipes; Inspection and testing of aircraft pipes and hoses; Installation and clamping of pipes.</i>	1	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.10 Springs <i>Inspection and testing of springs.</i>	1	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.11 Bearings <i>Testing, cleaning and inspection of bearings; Lubrication requirements of bearings; Defects in bearings and their causes.</i>	1	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.12 Transmissions <i>Inspection of gears, backlash; Inspection of belts and pulleys, chains and sprockets; Inspection of screw jacks, lever devices, push-pull rod systems.</i>	1	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.13 Control Cables <i>Swaging of end fittings; Inspection and testing of control cables; Bowden cables; aircraft flexible control systems.</i>	1	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.14 Material handling	-	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab

7.14.1 Sheet Metal <i>Marking out and calculation of bend allowance; Sheet metal working, including bending and forming; Inspection of sheet metal work.</i>				<input type="checkbox"/> Kontrollitud, ei vasta
7.14.2 Composite and non-metallic <i>Bonding practices; Environmental conditions; Inspection methods.</i>	-	2	-	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.14.3 Additive manufacturing <i>Common additive manufacturing techniques and their influence on the mechanical properties of the finished part; Inspection of additive manufactured parts and common production failures.</i>	1	1	1	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta MÄRKUS: Alateema 7.14.3 Additive manufacturing õppematerjal Moodle keskkonnas
7.15 (Reserved).				N/A
7.16 Aircraft Weight and Balance <i>(a) Calculation of centre-of-gravity / balance limits: use of relevant documents.</i> <i>(b) Preparation of aircraft for weighing; Aircraft weighing.</i>	- -	2 2	2 -	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.17 Aircraft Handling and Storage <i>Aircraft taxiing/towing and associated safety precautions; Aircraft jacking, chocking, securing and associated safety precautions; Aircraft storage methods; Refuelling/defuelling procedures; De-icing/anti-icing procedures; Electrical, hydraulic, and pneumatic ground supplies; Effects of environmental conditions on aircraft handling and operation.</i>	2	2	2	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.18 Disassembly, Inspection, Repair and Assembly Techniques <i>(a) Types of defects and visual inspection techniques; Corrosion removal, assessment and re-protection;</i> <i>(b) General repair methods, Structural Repair Manual; Ageing, fatigue and corrosion control programmes;</i> <i>(c) Non-destructive inspection techniques including penetrant, radiographic, eddy current, magnetic particle, ultrasonic and borescope inspections; including practical training in colour contrast penetrant inspection;</i> <i>(d) Disassembly and re-assembly techniques;</i> <i>(e) Trouble shooting techniques.</i>	2 - - 2 -	3 2 2 2 2	3 - 1 2 2	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta MÄRKUS: Täiendav õppematerjal Moodle keskkonnas
7.19 Abnormal Events				<input checked="" type="checkbox"/> Kontrollitud, vastab

(a) <i>Inspections following lightning strikes and HIRF penetration;</i>	2	2	2	<input type="checkbox"/> Kontrollitud, ei vasta
(b) <i>Inspections following abnormal events such as heavy landings and flight through turbulence.</i>	2	2	-	
7.20 Maintenance Procedures <i>Maintenance planning; Modification procedures; Stores procedures; Certification/release procedures; Interface with aircraft operation; Maintenance Inspection / Quality Control / Quality Assurance; Additional maintenance procedures; Control of life-limited components.</i>	1	2	2	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta
7.21 Documentation and communication <i>Documentation: elements and criteria for writing work reports, troubleshooting reports, and shift handover instructions. Communication: clear, comprehensive, and concise</i>	1	2	2	<input checked="" type="checkbox"/> Kontrollitud, vastab <input type="checkbox"/> Kontrollitud, ei vasta MÄRKUS: Alateema 7.21 Documentation and communication õppematerjal Moodle keskkonnas

OTSUS:

Õppematerjal **vastab** kehtiva määruse Osa-66 Lisa III I liite mooduli programmile.

Õppematerjali vastavuse kontrollis ja kinnitas:

MTO koolitusjuht: Madis Parv
/allkirjastatud digitaalselt/

Kuupäev: 12.02.2026