

MIP for aeroplanes of 2,730 kg MTOM and below

This AMC contains an acceptable MIP for aeroplanes of 2 730 kg maximum take-off mass (MTOM) and below, and for ELA2 aircraft other than airships, grouped in the following categories:

— aeroplanes of 2 730 kg MTOM and below;

These MIPs already comply with the requirements of ML.A.302(d) and may be used in order to define the basic information for the maintenance programme as required by ML.A.302(c)(2)(a). However, the maintenance programme must be customised as required by ML.A.302(c)(5), which may be achieved by using the standard template contained in AMC ML.A.302.

It should be noted that using the 1-month tolerance permitted by ML.A.302(d)(1) for the annual inspection may result in an expired ARC.

MIP for aeroplanes of 2,730 kg MTOM and below

To be performed at every annual/100-h interval, whichever comes first.

A tolerance of 1 month or 10 h may be applied. The next interval shall be calculated from the time the inspection takes place.

Note 1: Use the manufacturer's maintenance manual to accomplish each task/inspection.

Note 2: Proper operation of backup or secondary systems and components should be performed wherever a check for improper installation/operation is carried out.

Aeroplanes of 2 730 kg MTOM and below	
System/component/area	Task and inspection detail
GENERAL	
General	Remove or open all necessary inspection plates, access doors, fairings, and cowlings. Clean the aircraft and aircraft engine as required.
Lubrication/servicing	Lubricate and replenish fluids in accordance with the manufacturer's requirements.
Markings	Check that side and underwing registration markings are correct. If applicable, check that an exemption for alternate display is approved. Identification plate for national aviation authority (NAA)-registered aircraft is present, as well as other identification markings on fuselage in accordance with local (national) rules.
Weighing	Review weighing record to establish accuracy against installed equipment. Weigh the aircraft as required by Part-NCO or Part-SPO, as applicable.
Service life limits	Check the records that the service life limits and airworthiness limits are within the life time limits of the maintenance programme.

Software	Check for updated software/firmware status and databases for engine and equipment.
AIRFRAME	
Fabric and skin	Inspect for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings. NOTE: When checking composite structures, check for signs of impact or pressure damage that may indicate underlying damage.
Fuselage structure	Check frames, formers, tubular structure, braces, and attachments. Inspect for signs of corrosion and cracks.
Systems and components	Inspect for improper installation, apparent defects, and unsatisfactory operation.
Pitot-static system	Inspect for security, damage, cleanliness, and condition. Drain any water from condensation drains.
General	Inspect for lack of cleanliness and loose equipment that may foul the controls.
Tow hooks	Inspect for condition of moving parts and wear. Check service life. Carry out operational test.
CABIN AND COCKPIT	
Seats, safety belts and harnesses	Inspect for poor condition and apparent defects. Check for service life.
Windows, canopies and windshields	Inspect for deterioration and damage, and for function of emergency jettison.
Instrument panel assemblies	Inspect for poor condition, mounting, marking, and (where practicable) improper operation. Check markings of instruments in accordance with the flight manual.
Flight and engine controls	Inspect for improper installation and improper operation.
Speed/weight/manoeuvre placard	Check that the placard is correct and legible, and accurately reflects the status of the aircraft.
All systems	Inspect for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.
LANDING GEAR	
Shock-absorbing devices	Inspect for improper oleo fluid level. Inspect for wear and deformation of rubber pads, bungees, and springs.
All units	Inspect for poor condition and insecurity of attachment, including the related structure.

Retracting and locking mechanism	Inspect mechanism. Operational check.
Linkages, trusses and members	Inspect for undue or excessive wear fatigue and distortion.
Steering	Inspect the nose/tail wheel steering for proper function and wear.
Hydraulic lines	Inspect for leakage. Check condition and replace if necessary.
Electrical system	Inspect for chafing. Operational check of switches.
Wheels	Inspect for cracks, defects, and condition of bearings.
Tires	Inspect for wear and cuts.
Brakes	Inspect for improper adjustment and wear. Carry out operational test.
Floats and skis	Inspect for insecure attachment and apparent defects.
WING AND CENTRE SECTION	
All components	Inspect all components of the wing and centre section assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure and insecurity of attachment.
Connections	Inspect main connections (e.g. between wings, fuselage, wing tips) for proper fit, play within tolerances, wear or corrosion on bolts and bushings.
FLIGHT CONTROLS	
Control circuit/stops	Inspect control rods and cables. Check that the control primary stops are secure and make contact.
Control surfaces	Inspect aileron, flap, elevator, air brake and rudder assemblies, hinges, control connections, springs/bungees, tapes and seals. Check full range of motion and free play.
Trim systems	Inspect trim surfaces, controls, and connections. Check full range of motion.
EMPENNAGE	
All components and systems	Inspect all components and systems that make up the complete empennage assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, insecure attachment, improper component installation, and improper component operation.
AVIONICS AND ELECTRICS	
Batteries	Inspect for improper installation, improper charge, spillage and corrosion.
Radio and electronic equipment	Inspect for improper installation and insecure mounting. Carry out ground function test.

Wiring and conduits	Inspect for improper routing, insecure mounting, and obvious defects.
Bonding and shielding	Inspect for improper installation, poor condition, chafing and wear of insulation.
Antennas	Inspect for poor condition, insecure mounting, and improper operation.
Lights	Operational check of the interior, exterior and instrument lightning
POWER PLANT (OTHER THAN TURBOPROP ENGINE)	
Engine section	Inspect for visual evidence of oil, fuel or hydraulic leaks and sources of such leaks.
Studs and nuts	Inspect for looseness, signs of rotation and obvious defects.
Internal engine	Inspect for proper cylinder compression (record measures for each cylinder) and for metal particles or foreign matter in oil filter, screens and sump drain plugs.
Engine mounts	Inspect for cracks, looseness of mounting, and looseness of the engine to the engine-mount attachment.
Flexible vibration dampeners	Inspect for poor condition and deterioration.
Engine controls	Inspect for defects, improper travel, and improper safe tying.
Lines, hoses and clamps	Inspect for leaks, improper condition, and looseness.
Exhaust stacks	Inspect for cracks, defects, and improper attachment.
Turbocharger and intercooler	Inspect for leaks, improper condition, and looseness of connections and fittings. Check MP controller or density controller for leakage and free movement of controls. Check waste gate or overpressure relief valve for free movements.
Heating	Inspect cabin heating heat exchanger for improper condition and function. For exhaust heat exchanger, check CO (Carbon Monoxide) concentration.
Liquid cooling systems	Inspect for leaks and proper fluid level.
Electronic engine control	Inspect for signs of chafing, and proper electronics and sensor installation.
Accessories	Inspect for apparent defects in security of mounting.
All systems	Inspect for improper installation, poor general condition, defects and insecure attachment.
Cowling	Inspect for cracks and defects. Check cowling flaps.
Cooling baffles and seals	Inspect for defects, improper attachment, and wear.

TURBOPROP ENGINE	
Incoming power check	Perform in accordance with the graphs found in the engine maintenance manual (EMM).
Inertial separator	Functional check
Engine cowling	Remove, inspect for damage.
General condition	Inspect for oil, fuel, bleed-air or other leaks.
1st stage compressor blades	Remove screen, check for foreign object debris (FOD) or other damage.
P ₃ filter	Replace
Oil filter	Inspection and cleaning
Fuel low pressure filter	Replace
Fuel high pressure filter	Inspection and cleaning
Oil scavenge filter	Inspection and cleaning
Chip detector	Inspection and cleaning
Exhaust duct	Inspection
Starter/generator brushes	Inspection for proper length
Ignitor/glow plugs	Functional check
Overspeed governor	Inspect for oil leaks.
Governor and beta-valve	Inspect for oil leaks or binding of controls.
Propeller	Inspect blades for damage and hub leaks.
(if installed) fire detector loop or sense module	Functional check
Engine cowling	Install
Power check	Perform in accordance with the graphs found in the EMM, record values.
Oil level	Check within 10 minutes after shutdown.
FUEL	
Fuel tanks	Inspect for leaks and improper installation and connection. Verify proper sealing and function of tank drains.
CLUTCHES AND GEARBOXES	
Filters, screens, and chip detectors	Inspect for metal particles and foreign matter.

Exterior	Inspect for oil leaks.
Output shaft	Inspect for excessive bearings' play and condition.
PROPELLER	
Propeller assembly	Inspect for cracks, nicks, binds, and oil leakage.
Propeller bolts	Inspect for proper installation, looseness, signs of rotation, and lack of safe tying.
Propeller control mechanism	Inspect for improper operation, insecure mounting, and restricted travel.
Anti-icing devices	Inspect for improper operation and obvious defects.
MISCELLANEOUS	
Ballistic rescue system	Inspect for proper installation, unbroken activation mechanism, proper securing while on ground, validity of inspection periods of pyrotechnic devices, and parachute-packing intervals.
Other miscellaneous items	Inspect installed miscellaneous items that are not otherwise covered by this listing for improper installation and improper operation.
OPERATIONAL AND FUNCTIONAL CHECKS	
Power and revolutions per minute (rpm)	Check that power output, static and idle rpm are within published limits.
Magnetos	Check for normal function.
Fuel and oil pressure	Check that they are within normal values. Check fuel pumps for proper operation.
Engine temperatures	Check that they are within normal values.
Engine	For engines equipped with automated engine control (e.g. FADEC), perform the published run-up procedure and check for discrepancies.
Engine	For dry-sump engines, engines with turbochargers and liquid-cooled engines, check for signs of disturbed fluid circulation.
Pitot-static system	Perform functional check.
Transponder	Perform operational check.
Ice protection	Perform operational check of ice protection system.
Fuel quantity indication	Check the fuel quantity indication for proper indication.
Caution and warning	Operational check of cautions and warnings lights.