ANAC
Autoridade Nacional da Aviação Civil
Portuguese Civil Aviation Authority

Apêndice C – Programa Mínimo de Inspeção (PMI) em conformidade com o ponto do AMC M.A.302 (i)

Lista 1 - Aeronaves de Asa fixa do tipo ELA1 não envolvidas em operações comerciais

Sistema/componente/área	Tarefas & Detalhes da Inspeção
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 under-wing registration markings are correct. If applicable, check that an exemption for alternate display is approved. Identification plate for National Aviation Authority registered aircraft is present. Other identification markings on fuselage are in accordance with local (national) rules.
Weighing	Review weighing record to establish accuracy against installed equipment. Weigh the aircraft as required by the Part-NCO rules.
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.
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 might 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 fluid level. Inspect for wear and deformation of rubber pads, bungees, and springs.
All units	Inspect for poor condition and insecurity of attachment.
Retracting and locking mechanism	Inspect for improper operation.
Linkages, trusses and members	Inspect for undue or excessive wear fatigue and distortion.
Hydraulic lines	Inspect for leakage. Check service life.
Electrical system	Inspect for chafing and improper operation of switches.
Wheels	Inspect for cracks, defects, and condition of bearings.
Tyres	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, 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 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 and record range of movement and cable tensions, if specified, and check 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 and 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, and chafing and wear of insulation.
Antennas	Inspect for poor condition, insecure mounting, and improper operation.
POWERPLANT	
Engine section	Inspect for visual evidence of excessive 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 cylinder compression (record measures for each cylinder) and for metal particles or foreign matter in oil filter, screens and sump drain plugs. If there is weak cylinder compression, inspect for improper internal condition and improper internal tolerances.
Engine mounts	Inspect for cracks, looseness of mounting, and looseness of the engine to 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.
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.
Fuel tanks	Inspect for improper installation and connection.
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 bearing 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 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 they are within normal values.
Engine temperatures	Check 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 and engines with turbochargers and for liquid cooled engines, check for signs of disturbed fluid circulation.
Pitot-static system	Perform operational check.
Transponder	Perform operational check.