



Apêndice C – Programa Mínimo de Inspeção (PMI) em conformidade com o ponto do AMC M.A.302 (i)
Lista 2 - Planadores e Motoplanadores do tipo ELA1 não envolvidos em operações comerciais

Sistema/componente/área	Tarefas & Detalhes da inspeção
GENERAL	
General — all tasks	The aircraft must be clean prior to inspection. Inspect for security, damage, wear, integrity, drain/vent holes clear, signs of overheating, leaks, chafing, cleanliness and condition as appropriate to the particular task. Whilst checking composite structures, check for signs of impact or pressure damage that may indicate underlying damage.
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 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	
Fuselage paint/gel coat, including registration markings	Inspect external surface and fairings, gel coat, fabric covering or metal skin, and paintwork. Check that registration marks are correctly applied.
Fuselage structure	Check frames, formers, tubular structure, skin, and attachments. Inspect for signs of corrosion on tubular framework.
Nose fairing	Inspect for evidence of impact with ground or objects.
Release hook(s)	Inspect nose and Centre of Gravity (C of G) release hooks and controls. Check operational life. Carry out operational test. If more than one release hook or control is fitted, check operation of all release hooks from all positions.
Pot pitot/ventilator	Check alignment of probe, check operation of ventilator.
Pitot/static system	Inspect pitot probes, static ports and all accessible tubing for security, damage, cleanliness, and condition. Drain any water from condensation drains.
Bonding/vents drains	Check all bonding leads and straps. Check that all vents and drains are clear from debris.

CABIN AND COCKPIT	
Cleanliness/loose articles	Check under cockpit floor/seat pan and in rear fuselage for debris and foreign items.
Canopy, locks and jettison	Inspect canopy, canopy frame and transparencies for cracks, unacceptable distortion, and discolouration. Check operation of all locks and catches. Carry out an operational test of the canopy jettison system from all positions.
Seat/cockpit floor	Inspect seat(s). Check that all loose cushions are correctly installed and, as appropriate, energy absorbing foam cushions are fitted correctly. Ensure that all seat adjusters fit and lock correctly.
Harness(es)	Inspect all harnesses for condition and wear of all fastenings, webbing, and fittings. Check operation of release and adjustments.
Rudder pedal assemblies	Inspect rudder pedal assemblies and adjusters.
Flight control circuits/stops	Inspect flight controls rods/cables. Check that control stops are secure and make contact. Pay particular attention to wear and security of liners and cables in 'S' tubes. Inspect self-connecting control devices.
Instrument panel assemblies	Inspect instrument panel and all instruments/equipment. Check instrument readings are consistent with ambient conditions. Check marking of all switches, circuit breakers, and fuses. Check operation of all installed equipment, as possible, in accordance with the manufacturer's instructions. Check markings of instruments in accordance with the Flight Manual.
Oxygen system	Inspect oxygen system. Check bottle hydrostatic test date expiry in accordance with the manufacturer's recommendations. Ensure that the bottle is not completely empty (13,8 bars/200 psi minimum) and refill with aviator's oxygen only. Clean masks and regulators with suitable cleaning wipes. Ensure that the oxygen installation is recorded on weight and C of G schedule. CAUTION: OBSERVE ALL SAFETY PRECAUTIONS.
Colour-coding of controls	Ensure that controls are colour-coded and in good condition, as follows: Tow release: yellow Air Brakes: blue Trimmer: green Canopy normal operation: white Canopy jettison: red Other controls: clearly marked but not using any of the above colours.
Equipment stowed in centre section	Check for security and condition. Check validity of any safety equipment. Check the manufacturer's and the NAA's (if required) data plates.
Speed/weight/manoeuvre placard	Check that the placard is correct and legible and accurately reflects the status of the aircraft.
LANDING GEAR	
Front skid/nose wheel and mounts	Inspect for evidence of hard/heavy landings. Check skid wear. Inspect wheel, tyre, and wheel box. Check tyre pressure.

Main wheel and brake assembly	<p>Check for integrity of hydraulic seals and leaks in pipe work. Check life of hydraulic hoses and components if specified by the manufacturer. Remove brake drums, check brake lining wear. Check disk/drum wear. Refit drum. Check brake adjustment. CAUTION: BRAKE DUST MAY CONTAIN ASBESTOS.</p> <p>Check operation of brake. Check level of brake fluid and replenish if necessary. Check tyre pressure. CAUTION: CHECK TYPE OF BRAKE FLUID USED AND OBSERVE SAFETY PRECAUTIONS.</p>
Undercarriage suspension	<p>Check springs, bungees, shock absorbers, and attachments. Check for signs of damage.</p> <p>Service strut if applicable.</p>
Undercarriage retract system and doors	<p>Check retraction mechanism and controls, warning system if fitted, gas struts, doors and linkages/springs, over-centre/locking device. Perform retraction test.</p>
Tail skid/wheel	<p>Inspect for evidence of hard/heavy landings. Check skid wear. Inspect wheel, tyre, and wheel box. Check bond of bonded skids. Check tyre pressure.</p>
Wheel brake control circuit	<p>Inspect wheel brake control rods/cables. If combined with air brake, ensure correct rigging relationship. Check parking brake operation if fitted.</p>
WING AND CENTRE SECTION	
Centre section fairing	<p>Inspect for security, damage, and condition.</p>
Wing attachments	<p>Inspect the wing structural attachments. Check for damage, wear, and security. Check for rigging damage. Check condition of wing attachment pins.</p>
Aileron control circuit/stops	<p>Inspect aileron control rods/cables. Check that control stops are secure and make contact.</p> <p>Inspect self-connecting control devices.</p>
Air brake control circuit	<p>Inspect air brake control rods/cables. Check friction/locking device (if fitted). Inspect self-connecting control devices.</p>
Wing struts/wires	<p>Inspect wing struts for damage and internal corrosion. Re-inhibit wing struts internally every three years or in accordance with the manufacturer's instructions.</p>
Wings including underside registration markings	<p>Check mainplane structure externally and internally as far as possible. Check gel coat, fabric covering, or metal skin. Check that registration marks are correctly applied.</p>
Ailerons and controls	<p>Inspect aileron and flaperon assemblies, hinges, control connections, springs/bungees, tapes, and seals. Ensure that seals do not impair full range of movement.</p>
Air brakes/spoilers	<p>Inspect air brake/spoiler panel(s) operating rods, closure springs, and friction devices as fitted.</p>
Flaps	<p>Check flap system and control. Inspect self-connecting control devices.</p>
Control deflections and free play, and record on worksheets	<p>Check and record range of movements and cable tensions, if specified, and check free play.</p>

EMPENNAGE	
Tailplane and elevator	With tailplane de-rigged, check tailplane and attachments, self-connecting and manual control connections. Check gel coat, fabric covering, or metal skin.
Rudder	Check rudder assembly, hinges, attachments, balance weights.
Rudder control circuit/ stops	Inspect rudder control rods/cables. Check that control stops are secure and make contact. Pay particular attention to wear and security of liners and cables in 'S' tubes.
Elevator control circuit/stops	Inspect elevator control rods/cables. Check that control stops are secure and make contact. Inspect self-connecting control devices.
Trimmer control circuit	Inspect trimmer control rods/cables. Check friction/locking device.
Control deflections and free play, and record on worksheets	Check and record range of movements and cable tensions, if specified, and check free play.
AVIONICS AND ELECTRICS	
Electrical installation/fuses	Check all electrical wiring for condition. Check for signs of overheating and poor connections. Check fuses/trips for condition and correct rating.
Battery security and corrosion	Check battery mounting for security and operation of clamp. Check for evidence of electrolyte spillage and corrosion. Check that the battery has the main fuse fitted correctly. It is recommended to carry out battery capacity test on gliders equipped with radio, used for cross-country, controlled airspace, or competition flying.
Radio installations and placards	Check radio installation, microphones, speakers and intercom, if fitted. Check that the call sign placard is installed. Carry out ground function test. Record radio type fitted.
Altimeter datum	Check barometric sub-scale. Maximum error 2 Mb.
Pitot-static system	Perform operational check.
Transponder	Perform operational check.
MISCELLANEOUS	
Removable ballast	Check removable ballast mountings and securing devices (including fin ballast if applicable) for condition. Check that ballast weights are painted with conspicuous colour. Check that provision is made for the ballast on the loading placard.
Drag chute and controls	Inspect chute, packing and release mechanism. Check packing intervals.
Water ballast system	Check water ballast system, wing and tail tanks as fitted. Check filling points, level indicators, vents, dump and frost drains for operation and leakage. If loose bladders are used, check for leakage and expiry date as applicable.
POWERPLANT (when applicable)	
Engine pylons and mountings	Inspect engine and pylon installation. Check engine compartment and fire sealing.
Gas strut	Check gas strut.

Pylon/engine stops	Check limit stops on retractable pylons. Check restraint cables.
Electric actuator	Inspect electric actuator, motor, spindle drive, and mountings.
Electrical wiring	Inspect all electrical wiring. Pay special attention to wiring that is subject to bending during extension and retraction of engine/pylon.
Limit switches	Check operation of all limit switches and strike plates. Make sure that they are not damaged by impact.
Fuel tank(s)	Check fuel tank mountings and tank integrity. Check fuel quantity indication system if fitted.
Fuel pipes and vents	Check all fuel pipes especially those subject to bending during extension and retraction of engine/pylon. Check that vents are clear. Make sure that overboard drains do not drain into engine compartment. Check self-sealing.
Fuel cock or shut off valve	Check operation of fuel cock or shut-off valve and indications.
Fuel pumps and filters	Clean or replace filters as recommended by the manufacturer. Check operation of fuel pumps for engine supply or tank replenishment. Check fuel pump controls and indications.
Decompression valve	Inspect decompression valve and operating control.
Spark plugs	Carry out spark plug service. It is recommended to replace spark plugs at annual intervals.
Harnesses and Magneto	Inspect low-tension and high-tension wiring, connectors, spark plug caps. Check magneto to engine timing. Check impulse coupling operation.
Propeller bolts, assembly, mounting, torquing & drive belt	Inspect propeller, hub, folding mechanism, brake, pitch change mechanism, stow sensors.
Doors	Check engine compartment doors, operating cables, rods, and cams.
Safety springs	Check all safety and counterbalance springs.
Extension and retraction	Check that extension and retraction operation times are within limits specified by manufacturer. Check light indications and interlocks for correct operation.
Exhaust	Inspect exhaust system, silencer, shock mounts, and links.
Engine installation	Inspect engine and all accessories. Carry out compression test and record results. Compression test results: No1 (left/front): No2 (right/rear):
Lubrication	Change engine oil and filter. Replenish oil and additive tanks.
Engine instruments	Inspect all engine instruments and controls. Check control unit, mounts, bonding and connections. Carry out internal self-test if fitted.
Flexible vibration dampers	Check for poor condition and deterioration.
Engine battery	If separate from airframe battery, inspect battery and mountings. If the main fuse is fitted, check rating and condition. Perform a functional test.
Placards	Check that all placards are in accordance with flight manual and legible.
Oil and fuel leaks	With the engine fully serviced, check the fuel and oil system for leaks.