

Condition Inspection

Weight-Shift Control Aircraft

The following can be used as a guideline to start an inspection for your particular aircraft if you do not have the manufactures procedure.

Aircraft Make/Model: _____ S/N: _____ TT _____

Engine Make/Model: _____ S/N: _____ TT _____

Dates of Inspection _____

Inspector _____

Check all that apply

____ Owner ____ Operator ____ Pilot ____ Certified Mechanic
____ 100 hour or ____ Annual (which ever is less) or ____ Unknown aircraft

Last Inspection performed when date _____ Hours _____

Ready the aircraft to be inspected

- Remove or open all necessary inspection plates, access doors, fairing, and cowling
- Remove seats if needed to inspect systems under
- Thoroughly clean the aircraft and propulsion system.

Mark "P" for pass or "F" fail at each line _____

Wing

- _____ Control bar general condition, flying wire attachments to control bar and wing junction
- _____ Flying wires condition for frays and thimble/niko condition
- _____ Cross bar condition for bends, dents and structural attachments inboard and outboard
- _____ Leading edge for dents in tube and airfoil, symmetry in airfoil side to side
- _____ Wing tips for proper sail attachment, washout strut security, and tip batten attachment and condition
- _____ Trailing edge structural condition for tears or unusual wear. Batten strings tension and condition.
- _____ Reflex wires attachment to trailing edge and condition of wires
- _____ Wing ribs condition, symmetry, and airfoil shape if unsymmetrical
- _____ Aft keel wire attachments for king post, control bar, and cross bar hall back.
- _____ Upper ground wires for condition and attachments.
- _____ King post lower attachment, general condition, and upper cable attachments.
- _____ Nose plate general condition, control bar and king post wire attachments. Nose rib attachment and condition.
- _____ Keel general condition of all attachments and condition. Hang point condition for unusual wear.
- _____ Symmetry for right and left wings.
- _____ Wing fabric general condition for wear, tears, excessive sun and security of attachment. Upper and lower surfaces. Batten pockets security.
- _____ Fabric test by qualified mechanic for structural integrity if any wing fabric condition is in question.

Undercarriage Structure

- _____ Undercarriage hang point attachment general condition. Interface between wing and undercarriage mast is not showing unusual wear or play. Undercarriage hang point safety wire condition and attachments good.
- _____ Mast general condition, all structural attachments condition good, and security of all attachments.
- _____ Front tube general condition with good upper and lower attachments.
- _____ Keel general condition with structural attachments to front tube, mast, and front/back landing gear.
- _____ Seat side rails general condition with secure attachments to mast and keel.

Landing gear:

- _____ Shock absorbing devices general condition, security and operation (proper fluid level, bungee security, gas struts, and/or springs as required).
- _____ Front fork, nose wheel steering, security and reasonable play.
- _____ Suspension linkages, trusses, wires, and/or members for wear, cracks, fatigue, and distortion.
- _____ Hydraulic lines to brakes for leakage (if applicable).
- _____ Wheels for smooth operation, tightness, cracks, defects, condition of bearings and alignment.

- _____ Tires for pressure, wear, cuts and out of round.
- _____ Brakes for proper operation, adjustment, pad/drum/disk tolerances as appropriate.
- _____ Floats and skis for insecure attachment and obvious or apparent defects (if applicable).
- _____ Floats and skis systems repositioning and locking mechanisms for proper operation (if applicable).

Cockpit:

- _____ General condition of cockpit for cleanliness and loose equipment that could become dislodged and go through the propeller.
- _____ Seats and safety belts for good condition, operation, secure attachment, and acceptable wear.
- _____ Windshields for deterioration, breakage and security.
- _____ Instruments for general condition, mounting, marking, and (where practicable) operation.
- _____ Flight controls full range operation.
- _____ Engine throttles and mixture (choke/primer) for proper installation, smooth operation, locking and operation.
- _____ Brakes for operation, travel, security and general condition.
- _____ All cockpit controls and systems for proper installation, general condition, apparent and obvious defects, and security of attachment.
- _____ All certificates, documents, placards, nameplates and airworthiness certificates are current and in aircraft.

Propulsion system:

- _____ Basic maintenance items general condition and within recommended schedule (oils, cooling fluids, fuel filter, air filters, and spark plugs as required).
- _____ Inspect engine section for visual evidence of excessive oil, fuel, exhaust or hydraulic leaks.
- _____ Torque induction, exhaust, and cylinder heads to specifications as required.
- _____ Fuel tank general condition, fuel pick up screen, fuel tank vent, fuel lines to carburetor, primer bulb, primer system, fuel line condition, fuel filter and fuel system general condition and security.
- _____ Induction inlet boots for cracks and leaks
- _____ Cylinder compression check as required. Record values _____
- _____ Metal particles or foreign matter on screens and sump drain plugs.
- _____ Engine mounts for cracks, and security. Torque to proper POH values.
- _____ Flexible vibration dampeners general condition and security. Look for large cracks in aged or dried out rubber.
- _____ Engine controls general condition, travel, and safetied where required.
- _____ Lines, hoses, and clamps for leaks, condition and looseness.
- _____ Exhaust pipes for cracks, and proper attachment. Springs secured and safetied.
- _____ Nacelle or cowling for cracks, defects and security.
- _____ Propeller assembly for cracks and nicks. Torque propeller and gearbox to specifications.
- _____ Propeller balance and tracking.
- _____ Accessories and systems for proper installation, general condition, defects, and secure attachment.
- _____ Belts condition and tension as required.
- _____ Control cables lubrication where appropriate.
- _____ Follow 100 hour manufactures maintenance specifications

Systems

- _____ Radio and electronic equipment for improper installation and secure mounting.
- _____ Radio antenna position, security and operation.
- _____ Electric system wiring and conduits for proper routing, secure mounting, and obvious defects.
- _____ Batteries for proper installation, charge and general condition.
- _____ All other systems for proper attachment, security, and operation.
- _____ Ballistic parachute for proper attachment, routing, and general condition

_____ **Other items not listed here for proper installation, condition, operation or safety of flight.**

Notes and explanation of any problems, or items found that could progress to a safety of flight
(use additional sheets of necessary)

Inspector Name _____ Date completed and airworthy _____