

INSTRUMENTATION - ELECTRICAL

___ CHT/EGT gauge-- Check accuracy with hot oil and candy thermometer.
___ Check ELT for operation and battery replacement date.
___ Pitot/static systems-- Check for leaks.
___ Check radio antenna connections.
___ Oil Temp/Pressure-- Check accuracy.
___ Check low oil pressure light.
___ Tachometer-- check accuracy.
___ Service filter for gyro instruments.
___ Fuel Pressure-- Check accuracy.
___ Service battery.
___ Check wiring for chafing.
___ Check lights-- Nav, Landing Strobe, Cockpit

FUSELAGE GROUP

___ Check condition of fuselage skin and for delamination.

WING AND CANARD GROUP

___ Check surfaces for damage, delamination
___ Check fuel tanks for leaks, water.
___ Check Nav. Lights, strobes for operation, security.
___ Check rudder hinges, bell horn and attachments.
___ Check winglet skin for damage, delamination.
___ Check elevator hinges and attachments.
___ Check elevators for proper mass balance-- if modified.
___ Check ailerons for proper mass balance-- if modified.
___ Check ailerons, hinges, cables, pulleys and bell cranks for damage and operation. Lubricate.
___ Remove both wings and inspect glass around spar and attach fittings for cracks, delaminations.
___ Check wing attachment bolts.

LONG - EZ INSPECTION CHECK LIST

Type of Inspection: _____ Inspector: _____

Registration No.: N _____ Serial No.: _____ Date: ___/___/___

PROPELLER GROUP

___ Propeller bolts for proper torque (250 in.lbs.) and safetying.
___ Check propeller tracking, 1/16" maximum tip variation.
___ Inspect Propeller extension for cracks, safetying
___ Fill nicks and clean
___ Clock the prop for compression at the 10 O'Clock Position for proper hand-proping.

ENGINE GROUP

___ Change oil, check oil level.
___ Clean oil intake and outlet screens.
___ Check oil lines for chafing
___ Inspect oil cooler.
___ Check and clean or replace air filter if needed
___ Inspect engine mount, vibration dampers and bolts for safetying and security.
___ Check mixture, throttle, carb heat controls for security and proper function. Lubricate.
___ Check magneto wiring. Check that mags are cold with switches off
___ Check that the magneto impulse coupling clicks at or after top dead center.
___ Check Magneto timing.
___ Check torque of valve cover screws.
___ Check exhaust system for cracks, leaks, security
___ Clean engine and cowl, inspect cowl and fasteners.
___ Inspect vacuum pump.
___ Inspect carburetor heat box.
___ Inspect starter and alternator, belt
___ Inspect crankcase, check for loose hardware.
___ Clean and gap spark plugs (.018"), reverse top to bottom.
___ Inspect for excessive oil leakage.
___ Check that cowl baffles fit tightly all around the engine and cowl; check for cracks/ stop drill.
___ Perform compression check: If below 60/80 inspect internal condition and tolerances.
___ Compression readings: 1: _____ 2: _____ 3: _____ 4: _____
___ Run engine-- Check for leaks, mag drops and ground, idle speed, mixture cutoff.

FUEL SYSTEM

Check that the fuel caps seal securely.
Inspect fuel valve for proper function. Re-lub if necessary.
Inspect gascolator, clean filter, safety
Inspect fuel tank vent system— open, no leaks.
Check fuel lines for chafing.
Inspect and clean carburetor finger screen.
Carburetor float bowl-- disassemble and check for contamination. Inspect float, needle valve and seat for gummy substances.
Pressure check fuel system with electric pump on for leaks and pressure 2-8 psi.

MAIN GEAR

Adjust brakes and test for proper function. Service fluid.
Recheck rudder travel-- 5.5" to 6.5".
Double check that all attach bolts and axle bolts are installed and secured.
Check tires for proper inflation— 40 psi mains and nose wheel.
Pack wheel bearing with grease and safety
Check brake line for heat damage, brittleness, insulation.
Check brake mechanism for safetying
Check brake pucks for wear.
Double check for proper main tire toe-in ($1/4^{\circ}$ - $1/2^{\circ}$ per side).
Check main gear strut attachment (per CP 47 Pg 9).

NOSE GEAR

Nose gear tier inflation, 40 psi.
Grease wheel bearing.
Check axle nut for security and proper installation.
Check Shimmy damper friction adjustment (2-4 lb side force.).
Check for damage, wear.
Grease worm gear and worm with light grease.
Check safetying and security on all actuating mechanism hardware.
Verify nose gear warning micro switch activates in last $1/10$ " of NG50 travel.
Hold nose up and cycle gear with a 10 lb load to simulate air drag to verify proper function and locking. Verify over center condition on NG50.

CONTROL SYSTEM

Check that canopy sponge seals are in place and that canopy locking handle is adjusted so it must be forced forward to lock. Check hinges for damage, safety catch operation, rig for equal pressure snugness.
Remove canard— inspect rudder pedals, battery, now gear retract mechanism, canard lift tabs, elevator torque tubes, elevator balance weights for freedom and security.
Check elevator and aileron push rods for proper installation (spacers, washers, bolt, locknuts, clevis pins and safety clips installed properly, not worn out).
Check elevator and aileron push rods for freedom of movement throughout control travel.
Check pitch, roll and yaw trim mechanisms for proper function and freedom of movement.
Check elevator and aileron hinge attachment screws for safety and jam nut installation
Check elevator and aileron for freedom of movement throughout range without binding or chafing.
Check rudder pedals for freedom of movement, cable attachments, and positive return to neutral.
Check rudder pulleys for free rotation and cable guard installation (cotter pins on pulley brackets).
Check cable clearance throughout control travel.
Check brake actuating cable freedom.
Check all rod ends— reject any with evidence of bent tangs.
Check cables, control rods for chafing.
Check for minimum ($1/16$ ") clearances around all mass balances.

COCKPIT GROUP

Inspect for cleanliness and loose equipment
Inspect canopy seal, hinges, latches & safety catch
Inspect canopy for condition, breakage.
Inspect seat belts, and mountings.
Check pitch trim control operation and installation.
Check flight controls for installation and operation.
Check instruments, lines, attachments & markings.
Inspect cabin heater.
Check condition of heater controls and ducts and air vents
Lubricate controls.