

PRE-FLIGHT FINAL INSPECTION AMATEUR BUILT AIRCRAFT

Review this form **before** you call the L4 Amateur Built Inspector.

It is the builder's responsibility to provide **this** inspection checklist and ensure all matters pertaining to the aircraft construction and preparation have been completed.

- Aircraft is complete.** No outstanding or remaining jobs. All equipment and furnishings are installed.
- Registration Markings.** The aircraft has the required registration markings affixed as per Section 5.1 of Technical manual. Supply image of LHS and RHS registration to RAAus.
- Warning Placards/labels.** The aircraft has the required placards/labels affixed as per Section 9.1 of Technical manual. Supply image of Warning Placard and MTOW placard to RAAus.
- Builder's Construction Log Book.** The builder's construction log book and verification of stage inspections conducted must be in a respectable format and available. Photographs or various construction stages are available.
- Weight and Balance report (or weighing report for 95.32).** A workable document giving weight and balance details is required. See Section 10 of the RAAus Technical Manual. Supply copy of report to RAAus.
- Basic Fuel Calibration.** A basic fuel calibration is to have been carried out. Detail will depend on your system. Fuel bowser accuracies are acceptable.
- Aircraft Maintenance Log Book.** Appropriately prepared for the aeroplane. (Log book available from RAAus Office)
- RAAus Membership.** The nominated test pilot **must** be a current member of RAAus and hold a valid RAAus Pilot's Certificate.
- Fire-proof Data Plate**

PRE-FLIGHT FINAL INSPECTION AMATEUR BUILT AIRCRAFT

All inspections to be conducted as listed or appropriate to equipment fitted.

Aircraft Identification:		
Owner _____	Engine make _____	
Aircraft Type _____	Engine model _____	
Serial number _____	Engine serial number _____	
Registration number _____	Engine total time _____	
Airframe total time _____	Propeller make Propeller _____	
	serial number Propeller _____	
	total time _____	
S = Satisfactory U = Unsatisfactory N/A = Not Applicable (correct any unsatisfactory items prior to signing off this form)	L2 / L4	
	S	U
PAPERWORK		
Weight and Balance Report		
Airservices Permission to operate without a noise certificate		
Flight Manual or Pilot's Operating Handbook (or draft to be completed)		
Maintenance Manual(s)		
Flight Test Schedule (eg RAAus, FAA AC90-89A, etc)		
RAAus Aircraft Log Book		
RAAus Airworthiness Notices addressed and signed off in Aircraft Log Book		
Manufacturer's Service Bulletins addressed and signed off in Aircraft Log Book		
Comments:		

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	S	U
FUSELAGE		
Remove Inspection Plates and Panels		
Inspect Bulkheads and Stringers for Popped Rivets and Cracked Skin		
Inspect for Delaminated Skin/Voids (Coin Test)		
Inspect the Security of all Internal Lines		
Inspect Windows/canopy for Cracks and Fit		
Inspect Door or Canopy Latching Mechanism		
Inspect Fire Wall for Distortion and cracks		
Check Control Stick/Yoke for "Full, Free and Correct" movement		
Check Flap Control Operation		
Check Cable and Pulleys for Attachment and Operation		
Ensure the Cockpit Instruments are Properly Marked		
Inspect Instruments, Lines for Security		
Inspect Cockpit Fresh Air Vents/Heater Vents for Operation and Security where fitted		
Inspect Seats, Seat Belts/Shoulder Harness for Security and Attachment		
Corrosion		
Check Ballistic Chute Installation per Manufacturer		
Ballistic chute warning placards on airframe		
Amateur Built Placard Installed		
Fireproof Aircraft Identification Plates Installed		
Comments:		

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	S	U
LANDING GEAR		
Inspect Struts/Torque Links for Attachment		
Inspect Struts for Proper Extension		
Inspect for Hydraulic Leaks		
Check all Bushings for Wear/Free Play		
Check Lubrication		
Inspect Wheels for Alignment		
Wheel Tyres for Cracks and Serviceability		
Wheel Bearings for Lubrication		
Inspect for Corrosion		
Inspect Nose Gear for Cracks and Travel		
Inspect Tail Wheel for Cracks and Travel		
Perform Gear Retraction Test/CK Indicator Lights		
Emergency Gear Extension System		
Check Tyre Pressure		
Brake Lining within Limits		
Brake Discs for Cracks, Wear and Deformity		
Brake Hydraulic Lines for Leaks and Security		
Comments:		

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	S	U
WINGS		
Remove Inspection Plates/Fairings		
General Inspection of Exterior/Interior Wing		
Flight Controls Balance Weights for Security		
Flight Controls Proper Attachment (No Slop)		
Flight Control Hinges/Rod End Bearings Serviceability		
Flight Controls Properly Rigged/Proper Tension		
Inspect all Control Stops for Security		
Trim Control Surface/Hinges/Rod End Bearing Service		
Skin Panels Delaminate/Voids (Coin Test)		
Popped Rivets/Cracked/Deformed Skin		
Fabric/Rib Stitching/Tape Condition		
Lubrication		
Wing Attach Points		
Flying/Landing Wires/Struts for Security		
Corrosion		
Flight Control Bolts/Pins for Safety and Condition		
Wing/Strut/Cable attachments and Hardware for Safety and Condition		
Comments:		

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	S	U
EMPENNAGE / CANARD		
Remove Inspection Plates and Fairings		
Inspect Canard attach Points for Security		
Inspect Vertical Fin attach points		
Inspect Elevator/Stabiliser attach points		
Inspect Hinges/Trim Tabs/Rod Ends for attachment and Free Play (slop)		
Inspect Empennage/Canard Skin for Damage/Corrosion		
Inspect all Control Cables, Hinge and Pulleys		
Inspect all Control Stops		
Check all attachment Points and Controls for Safety Condition		
Comments:		
FUEL SYSTEM		
Corrosion		
Fuel Lines for Chafing/Leaks/Security/Condition		
Sump all Fuel Tanks for Water or Debris		
Fuel Caps for Security		
Fuel Placard		
Fuel Valve/Cross Feed/ for Operation and Security		
Clean Fuel Filters & Gascolator, Flush System		
Inspect Fuel Tank Vent System		
Comments:		

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PROPELLER		
Check Spinner and Back Plate for Cracks		
Inspect for Cracks/Stones Damage/Nicks		
Check for Delamination (Wood/Composite Blades)		
Check Prop Bolts Torque/Safety Wire		
Check for Oil Leaks (Crankcase Nose Seal)		
Grease Leaks (Constant Speed Prop)		
Check Propeller Governor for Leaks and Operation		
Check Prop Track		
Check Prop Balance (Wood Prop – at engine run up test)		
Comments:		
ELECTRICAL		
Spares Fuses Available		
Battery Serviced and Free from Corrosion		
Battery Box Free from Corrosion		
Check Anti Collision Light for Operation		
Inspect all Antenna Mounts and Wiring for Security		
Check all Grounding Wires (Engine to Airframe, Wing to Aileron/Flap etc)		
Inspect Radios/Leads/Wires for attachment and Security		
Inspect Circuit Breaker/Fuses Panels for Condition		
Comments:		

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	S	U
OPERATIONAL INSPECTION		
Check Carb Boots on 2 Cycle engine for Cracks		
Check Safeties on Exhaust Springs		
Ensure Spark Plug Caps are Safetied on Inverted Engines		
Visual Inspection of the Engine/Propeller		
All Inspection Panels and Fairings secure		
Proper Fuel in Tanks		
Brake System Check		
Engine Start Procedures – engine to be run at full power for 3 min continuously		
Oil Pressure/Oil Temperature within Limits		
Vacuum Gauge Check		
Magneto Check/Hot Mag Check		
Idle RPM/Mixture Check		
Static RPM Check		
Electrical System Check		
Cycle In-Flight adjustable props through entire range		
Cool Down Period/Engine Shut Down		
Perform Oil, Hydraulic and Fuel Leak Check		
Comments:		

CERTIFICATION OF INSPECTION

OWNER:

I _____ Membership number _____

of _____

being the builder of _____ (type & model)

RAAus registration no _____ Serial No _____

hereby certify that I have thoroughly inspected this aircraft for compliance with good airworthiness practices, quality of workmanship, and full, free and correct function of all control systems and equipment fitted to the aircraft in accordance with the **TECH FORM 007** checklist and found the aircraft to be satisfactory. There are no unsatisfactory items to be cleared before flight.

I fully understand and accept that I and no other person or organisation is responsible for the Airworthiness of this aircraft.

I acknowledge that the aircraft must not be flown until such time as the Technical Manager has issued a Permit to Test Fly the aircraft.

Builder's Signature _____ Date / /

**THE AIRCRAFT MUST NOT BE FLOWN UNTIL A
PERMIT TO TEST FLY THE AIRCRAFT IS ISSUED BY
THE RAAus TECHNICAL MANAGER**

RECOMMENDATION FOR TEST FLYING

To RAAus Technical Manager
From RAAus Level 4 for Amateur Built Aircraft:

I _____ being an RAAus L4 have personally observed the Pre-Flight Final Inspection being conducted by the owner and witnessed their signature at the Certification of Inspection within Tech Form 007.

I recommend the aircraft be test flown in the area within 25nm (or other _____) radius of _____ (include map if required)

for a period of not less than _____ 25,40, (or other, not less than 25) hours.

Additional matters advised are: _____

Recommended Test Pilot _____ Phone No. _____

Recommended Test Pilot _____ Phone No. _____

RAAus L4 Amateur Built Inspector.

Signed _____

Name _____ Date / /

Membership Number _____

ALL PAGES OF TECH FORM 007 MUST BE FORWARDED