

TEN MOST COMMON REASONS FOR DELAYS TO APPLICATIONS FOR A FIRST PERMIT

When paperwork arrives in the Engineering Department following the completion of a build, various processing steps take place to check that all aspects of the build are satisfactory. The following items are areas that the applicant can check and act on prior to submitting the paperwork, and help to reduce the processing time and get flying sooner.

1. Aircraft owner is not a 'full plus' member or co-owner(s) not members.
Contact our membership department to resolve: 01280 846786 or join on-line. All co-owners must be members and only those with 'full plus' membership may liaise with the engineering department.
2. Incorrect or no fee paid.
The 'initial permit issue' fee must be sent with the build paperwork. The current fee is listed on the website: www.laa.uk.com – Engineering – Engineering Fees. Please make cheques payable to 'LAA'. Alternatively, credit/debit card payments can be taken over the phone.
3. Modifications have been incorporated that have not yet been applied for.
Modifications that are not listed on the TADS for the type as being optional modifications must be applied for. If Standard Mods exist for the type, the instructions for each individual Standard Mod must be followed (which may involve sending in particular information). If a mod has been done before on another example of the same type then it may be possible to apply for the mod as a Repeat Mod. See the Modifications page in the Engineering section of the website for more details. It is generally much more efficient to apply for mods during the build process rather than at the end: applying at the same time as the permit application is likely to significantly delay the flight test paperwork.
4. Inspection Record pages left blank.
All the sections of the build Inspection Record should be complete, including all the Declaration of Design and Component Record sections. If, for instance, there are no 'builder mods' on the aircraft, the sections should be marked as 'none' or 'not applicable' and counter-signed by the inspector. The signature blocks at the foot of each section should also be completed even if there are no entries.
5. Information missing from 'LAA required modifications' or 'manufacturer's service information' sections.
If a TADS exists for the type, the items in the respective sections of the TADS should be noted on these pages. All items listed on the TADS should be listed on the relevant section, noting 'n/a' or 'not applicable' if necessary: this helps us to quickly identify that all the relevant aspects have been considered. If available, the manufacturer's website should also be checked to see if there is any recent information that has not yet made it onto the TADS.
6. Non-type-specific MPDs not signed off.
The MPD page must include all MPDs that apply to the aircraft as a whole, which might include MPDs that are not type-specific. In particular MPD 1998-019 R1 (relating to the fuel system) applies to all Permit aircraft of MTOW 2730kg and below and needs to be signed off by the inspector. There are other MPDs for propellers, fuel filters, etc.
7. Engine or propeller not sufficiently defined.
The full designation of the engine and propeller need to be given. E.g. Lycoming IO-360-A1E (not 'Lycoming IO-360'), Hartzell HC-C2YR-1BFP/F7497 (not 'Hartzell variable pitch'), or Arplast 162DAM4875/3 (not 'Arplast ground adjustable').

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8. Choosing a new engine/propeller combination.
It makes the engineering department's job much simpler if exactly the same engine and propeller have previously been approved before on the type. Minor variations on the engine and propeller can be accommodated but can take time to research (e.g. a different IO-360 variant or a different diameter/pitch GT propeller). If the difference is significant (e.g. a Jabiru 3300A engine on an airframe that has previously only been fitted with a Rotax 912ULS, we would need either a major modification submission from the builder or a detailed submission from the manufacturer/importer).
9. Weight and balance report contains errors.
The most common errors include basic maths errors and not correctly identifying the worst forward and aft cases. For most types, the worst forward case is a light (55kg) pilot, no passenger, no baggage and no fuel; the worst aft case is often heavy fuel, heavy baggage and as much pilot/passenger payload as can be carried with the remaining weight.
10. No airfield or pilot information given.
In order to produce the Permit Flight Release Certificate for flight testing, we need to know where the aircraft is going to be flown from and who is going to be flying the aircraft in the test period. Airfields should be suitable for early flights with plenty of runway length and width available (see TL1.19) and pilots need to have sufficient experience on type (or similar type) and recency.

Further guidance material is available in the Technical Leaflets published on the website (www.laa.uk.com). Queries can be addressed to the Engineering Department on 01280 846786 or engineering@laa.uk.com

Examples of the build book sheets are attached.

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DECLARATION OF DESIGN

NOTE: Please read warning on page 2 of this Build Log Book and the TADS for your aircraft type before completing these pages. Inspectors must also refer to relevant sections of SPARS.

Aircraft Type: CLOUDBUSTER MK3 Serial # LAA 555-19999 Regn: G-WXYZ

1) Compliance with approved plans/build manual

I certify that (apart from the exceptions as listed in the remainder of this Declaration of Design) the above aircraft has been constructed strictly in accordance with the following drawings/build manual, using the specified materials and processes:

Drawings/build manual titled: CLOUDBUSTER MK3 BUILDERS' MANUAL (UK) ISSUE 2-1

Signed: Z. Briggs (Builder) Dated: 5/9/2015
Signed: A. Smith (Inspector) Dated: 5/9/2015

2) Manufacturer's/Designer's Options

The following options are incorporated in accordance with the manufacturer's/designers instructions:

Reference no	Description
<u>OPTIONAL MODS</u>	<u>HYDRAULIC TOE-BRAKES</u>
<u>OPTIONAL MODS</u>	<u>FORWARD-HINGED CANOPY</u>

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3) Mandatory Permit Directives

I certify that the following Mandatory Permit Directives have been complied with:

MPD Number	Description	One-off/repetitive	Inspector's signature
<u>1998-019 R1</u>	<u>FLEXIBLE FUEL TUBING</u>	<u>REPETITIVE</u>	<u>A. Smith</u>
<u>2014-005</u>	<u>UNDERCARRIAGE INSPECTION</u>	<u>ONE-OFF</u>	<u>A. Smith</u>

Signed: Z. Briggs (Builder) Dated: 5/9/2015
Signed: A. Smith (Inspector) Dated: 5/9/2015

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4) LAA Required Modifications:

I certify that the following LAA Modifications/Bulletins are complied with:

Mod/bulletin reference	Description	Inspector's signature
MOD/555/001	REVISED THROTTLE ARRANGEMENT	A Smith
MOD/555/002	REINFORCED PLAP LEVER	A Smith
MOD/555/003	ADDITION OF ELEVATOR SEALS	A Smith
AIL/MOD/PROP/09-008	WOODCOMP SR3000 PITCH GEAR INSP.	A Smith

Signed: *Z. Bloggs* Signed: *A Smith*
 (Builder) (Inspector)
 Dated: *5/9/2015* Dated: *5/9/2015*

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5) Manufacturer's Service Information

I certify that the following Service Bulletins / Service Letters are complied with:

Service bulletin/ service letter reference	Description	One-off/repetitive	Inspector's signature
SB-555-01	RUDDER PEDAL MATERIAL	ONE-OFF	A Smith
SB-555-02	CANOPY LATCH	REPETITIVE	A Smith
SB-555-03	TAILWHEEL STEERING ARM	N/A (NUSEWHEEL)	A Smith
SL-555-01	ALTERNATIVE TYRES	ONE-OFF	A Smith
SL-555-02	FUEL LINE ROUTING	ONE-OFF	A Smith

Signed: *Z. Bloggs* Signed: *A Smith*
 (Builder) (Inspector)
 Dated: *5/9/2015* Dated: *5/9/2015*

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6) Builder Modifications

I certify that the following builder modifications (either 'one-off', 'all of type' or 'standard mods') are installed in accordance with the modification leaflet drawings/requirements:

Mod number	Description	Inspector's signature
15729	AUTO PILOT INSTALLATION	<i>A Smith</i>

No other builder modifications or departures from the drawings/manual are incorporated, apart from those listed above.

Signed: *Z Bloggs* Signed: *A Smith*
(Builder) (Inspector)
Dated: *5/9/2015* Dated: *5/9/2015*

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7) Engineering Concessions

I certify that the following Engineering Concessions are installed in accordance with the concession drawings/requirements as approved by LAA:

Concession number	Description	Inspector's signature
—	NONE	<i>A Smith</i>

Declaration

I hereby declare that the aircraft has been built strictly in accordance with the design standard stated above, in accordance with the drawings and processes stated and that no other builder modifications or departures from the drawings/manual are incorporated. I understand that failure to comply with the required design standard or the incorporation of non-approved modifications will render the Permit to Fly invalid.

Signed: *Z Bloggs* Signed: *A Smith*
(Builder) (Inspector)
Dated: *5/9/2015* Dated: *5/9/2015*

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COMPONENT RECORDS DATA SHEET

Aircraft Type: *CLOUD BUSTER MK3* Registration: *G-WXYZ*
 Engine type: *JABIRU 3300A* Serial No: *33A9999*
 Gearbox type: *DIRECT DRIVE* Reduction ratio: *N/A*
 Exhaust silencer: *CLOUD BUSTER P/N SB7A* Intake muffler: *NONE FITTED*
 Exhaust after-muffler: *NONE FITTED*
 Engine hours at installation: since new *0* since overhaul: *0*
 Origin and history of engine: *NEW, SUPPLIED BY SKYCRRAFT LTD*
 Work effected on engine before installation: *JABIRU SB 700 INCORPORATED*

Date *5/9/2015* *A Smith* Approved Inspector's Signature

Type of propeller: *SENSENICH W54SK62* Diameter: *54"* Propeller pitch: *62"*

Fixed pitch/ground-adjustable/variable pitch/constant speed-

Instruments fitted	MAKE		MAKE
RPM Indicator:	<i>VDO</i>	ASI:	<i>FALCON</i>
Oil Pressure gauge:	<i>SMITHS</i>	Altimeter:	<i>WINTER</i>
Oil Temperature gauge:	<i>SMITHS</i>	Compass:	<i>SILVA</i>
CHT gauge:	<i>VDO</i>	Slip indicator:	<i>n/a</i>
EGT gauge:	<i>n/a</i>	Artificial stall warner:	<i>n/a</i>
Fuel Pressure gauge:	<i>VDO</i>	'G' meter:	<i>n/a</i>
Manifold Pressure gauge:	<i>n/a</i>		
Main Wheels:	<i>MATCO</i> } <i>AS SUPPLIED</i>	Tailskid:	<i>n/a</i>
Nose Wheels:	<i>MATCO</i> } <i>WITH KIT</i>	Tailwheel:	<i>n/a</i>
Brakes:	<i>n/a</i>		

Cockpit seat harness: Front seat(s) *LUCAS (AS SUPPLIED WITH KIT)* Rear seat(s) *n/a*

Battery type: *12Ah RED TOP* Alternator type: *JABIRU INTEGRATED*
 Regulator type: *JABIRU INTEGRATED* Voltmeter: *VDO* Ammeter: *n/a*
 Fuel capacity: *80 LITRES* Oil capacity: *2.3 LITRES*
 Fuel gauge: *VDO*

Date *5/9/2015* *A Smith* Approved Inspector's Signature