

CONTINUING AIRWORTHINESS ARRANGEMENTS FOR AIRCRAFT OPERATED ON A PERMIT TO FLY ADMINISTERED BY THE LAA (For Factory–Built ex C of A Types)

1. Introduction

EC regulation 1702/2003 was amended in accordance with NPA 9/2006 to allow the permanent grandfathering of previously approved flight conditions for aircraft types that are regulated by EASA but have previously been operating on a National Permit to Fly. In the UK this affected a number of aircraft having a Permit to Fly administered by the LAA. Each of these aircraft had to be transferred to an EASA Permit to Fly by 28th September 2008. For these 'grandfathered' aircraft, the aircraft's operating limitations are specified on the EASA Permit to Fly itself.

Later, in early 2016, EASA announced that in future any orphaned aircraft operating on an EASA Restricted Certificate of Airworthiness (RCoA) issued on the basis of a Special Airworthiness Specification (SAS) would be able to transfer to an enduring EASA Permit to Fly if the owner so wished. For these aircraft, each enduring EASA Permit to Fly would have a unique Flight Conditions document and Data Sheet which would specify the operating limitations and other important data, and the Permit to Fly be revalidated annually by the issue of a Certificate of Validity. While it would be the responsibility of the owner to apply directly to EASA for the approval of the associated Flight Conditions and to the CAA for the issue of the enduring EASA Permit to Fly, for aircraft falling within the LAA's technical scope, the LAA would be able to act as the issuing body for the initial and subsequent Certificates of Validity.

EASA has stressed that once an aircraft has transitioned to a Permit to Fly it is very unlikely that a return to a Certificate of Airworthiness will be possible.

The regulations require that the national continuing airworthiness arrangements are included as part of the design related flight conditions and included on the Permit to Fly. To include such detailed "standard" conditions on each Permit would be impractical and would unnecessarily increase the complexity of the flight document. Accordingly, it has been agreed that for each aircraft with an enduring EASA Permit to Fly that is eligible to be validated through the auspices of the LAA, the Permit to Fly issued under the amended regulations will have a "standard condition" requiring that the continuing airworthiness of the aircraft be managed in accordance with this document TL 2.15.

The purpose of this document is to define in one place the continuing airworthiness arrangements that are applicable to aircraft operating with an enduring EASA Permit to Fly. Issue 1 of this document covered the grandfathered aircraft that had previously operated on a national Permit to Fly. Issue 2 has been raised to include the rules applying to the RCoA aircraft operating with an SAS which have subsequently transferred to an EASA enduring PtF.

Additional detail can be found in related LAA Technical Leaflets (LAA TL) that may be found in the Engineering section of the LAA Web site at www.laa.uk.com

2. Scope of the Document

This document defines all the required continuing airworthiness arrangements applicable to aircraft holding an EASA enduring Permit to Fly that is validated by the LAA. The following aspects are addressed:-

- Defining the maintenance programme
- Certification of maintenance
- Approval of modifications and repairs
- Acceptance of parts and parts replacements
- Mandatory requirements for airworthiness
- Airworthiness defect reporting and resolution

3. Continuing Airworthiness Arrangements

3.1 The Maintenance Programme

An annual inspection and examination of the aircraft is mandatory and should be carried out approximately co-incident with the annual renewal of the Permit to Fly.

The annual inspection is carried out in accordance with the checklist which forms part of the standard LAA Permit renewal application process. The checklist is based on the CAA's LAMS (Light Aircraft Maintenance Schedule). The checklist is included on a Permit renewal application form and includes the requirements for an airworthiness review.

An LAA aircraft inspector must complete and sign the Permit renewal application form which the owner then presents to LAA Engineering for checking, and a Certificate of Validity is only issued by the LAA if the application is satisfactory.

Owners are further recommended by LAA to use the LAMS as a guide to their aircraft maintenance throughout the year. Normal practice is to carry out 50 hour and 100 hour inspections though owners are also encouraged to refer to manufacturer's maintenance schedule requirements, where available.

Airworthiness Directives and Mandatory Permit Directives must be complied with as they become applicable. For aircraft that have transferred from an EASA RCoA having a separate Flight Conditions document and Data Sheet, the applicable Airworthiness Directives are as listed in the Data Sheet.

The continued validity of a Permit to Fly is predicated on maintaining the aircraft in an airworthy condition, and the responsibility for this lies with the owner.

3.2 Maintenance Certification

All maintenance (with the exception of certain specified 'pilot maintenance' as defined in LAA TL 2.04) defect rectification and modification is to be certified by an "authorised person".

An authorised person is a LAA approved aircraft inspector. These inspectors have authority to sign and issue a Permit Maintenance Release (PMR) to certify work that they have inspected and found satisfactory (reference BCAR A3-7: Issue and Renewal of a Permit to Fly).

All work carried out must be described and recorded in the aircraft, engine or propeller log book as appropriate. An acceptable alternative is for the work to be described on separate worksheets that would then be retained by the owner and referenced in the relevant log book(s). A PMR can be entered into the logbook adjacent to the work recorded or on the worksheet(s) relating to the work in question.

LAA approved aircraft inspectors are awarded an approval by LAA Engineering following successful completion of an application process. Approval is signified by the issue of an inspector's card that defines the scope of the particular inspector's approval. An inspector's approval is subject to renewal on an annual basis.

3.3 Approval of Modifications and Repairs

3.3.1 Grandfathered Orphans that have transferred from a PFA Permit to Fly

For the orphan aircraft grandfathered onto an EASA Permit to Fly from an LAA or PFA Permit to Fly, LAA Engineering must approve all modifications and repairs having airworthiness significance in accordance with LAA modification procedures.

The installation of any modification or repair is only permitted subject to a suitably approved LAA inspector having checked the work and being satisfied with the quality and conformity of the aircraft to the design approved by LAA Engineering.

On satisfactory completion of the work, the LAA inspector will sign appropriate logbook entries and issue a Permit Maintenance Release.

Any modifications or repairs affecting the data presented on the Permit to Fly will require a new Permit to Fly to be requested and issued.

If flight testing is required for the approval of a modification or repair, a flight test authorisation is issued by LAA Engineering when satisfied with the design to be tested and the nature of the flight testing to be carried out.

The acceptance basis for modifications or repairs is compliance with an appropriate internationally accepted design code, or service experience plus an engineering review, or a combination of the two. Further information is provided in LAA Technical Leaflets TL 3.01, Approval of New Modifications, TL 3.09 Classification of Modifications and Repairs, and TL 3.10, When Modification Approval is Not Required.

LAA modification and repair approval procedures have been accepted by CAA under the terms of the UK National approval granted to LAA.

3.3.2 Aircraft that have transferred from an EASA RCoA

For aircraft that have transferred from an EASA RCoA, and having a separate associated Flight Conditions and Data Sheet, alternative rules apply. For these aircraft, LAA are not able to approve modifications, all modifications must be approved by EASA unless they are either in accordance with CS-STAN 'Certification Specifications for Standard Changes and Standard Repairs' which can be downloaded from the EASA website.

Any change or repair embodied other than one which is either in accordance with CS-STAN or an EASA approved change/repair scheme will invalidate the flight conditions and render the Permit to Fly invalid.

3.4 Acceptance of Parts and Parts Replacements

3.4.1 Grandfathered Orphans that have transferred from a PFA Permit to Fly

Original parts are accepted for installation on an aircraft under these arrangements.

Alternative parts may also be used subject to the results of a LAA Engineering investigation determining them to be suitable alternatives.

Alternative parts may be accepted on the basis of the following: -

- the parts have been approved for that application on the Type Certificate Data Sheet, or by an STC or equivalent documentation,
- by complying with appropriate parts of an internationally acceptable design code,
- equivalence with the original parts,
- by service experience in previous equivalent applications plus an engineering review.

Alternative parts are not required to be manufactured under any manufacturing approval, the LAA inspector involved in the installation of the part must assess whether the parts are fit for purpose.

3.4.2 Aircraft that have transferred from an EASA RCoA

For these aircraft, different rules apply. Spare parts may be sourced either in accordance with EASA Part MA.501 or EASA part 21.A.307

3.5 Mandatory Requirements for Airworthiness

Compliance with all applicable Mandatory Permit Directives (MPDs) is mandatory, including any MPD relating to the airframe, engine, propeller or equipment fitted. Further information is provided in LAA Technical Leaflet TL 2.14 Continued Airworthiness.

MPD 1995-001 mandates compliance with all applicable published Airworthiness Directives (ADs) for LAA 'vintage' type aircraft, including any AD relating to the airframe, engine, propeller or equipment fitted. This applies to ADs issued by the CAA (reference CAP 747: Mandatory Requirements for Airworthiness), EASA or the state of design of the aircraft, engine, propeller or equipment concerned.

The minimum equipment requirements are as called for by Schedule 4 of the ANO for day VFR aircraft.

For aircraft operating on the basis of a Flight Conditions document and Data sheet associated with the enduring EASA Permit to Fly, any mandatory requirements stated on the Flight Conditions or the Data Sheet are also mandatory.

3.6 Airworthiness Defect Reporting and Resolution Procedures

Owners, operators and LAA approved aircraft inspectors are requested to report to LAA Engineering airworthiness defects which might have significance to the airworthiness of other aircraft. A reporting form is provided for this purpose.

- Reported defects are investigated by LAA Engineering, and the findings reviewed by the LAA Engineering team. An appropriate response is then determined. Such responses can be, but are not limited to:
- the issue of a LAA Service Bulletin,
- an article in the LAA membership magazine Light Aircraft, or
- an entry into inspection-notes supplied routinely to all LAA approved aircraft inspectors.

The LAA may also request the CAA to issue a Mandatory Permit Directive (MPD). Only the MPD is a legally mandatory closing action.

4. Applicability

The continuing airworthiness arrangements defined herein are applicable to all aircraft where the following condition forms part of the Permit to Fly.

“Continuing Airworthiness management must be carried out in accordance with document ref TL.15 Orphan Aircraft Airworthiness Regime at issue 2 or subsequent”

5. References

5.1 Documentary References

EC Regulation 1702/2003 as amended March 2007.
BCAR Section A3-7 Issue and Renewal of Permits to Fly.
LAA Technical Leaflets.
CAP 411 CAA Light Aircraft Maintenance Schedule.
CAP 747 Mandatory Requirements for Airworthiness.
CAP 661 Mandatory Permit Directives.

5.2 Web resources

LAA Web site www.laa.uk.com
CAA Web site www.caa.co.uk
EASA Web site www.easa.europa.eu

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