

INTRODUCTION

This Technical Leaflet provides guidance on flight testing aircraft under the LAA. It also states mandatory limitations that must be observed when carrying out flight testing. If there is any doubt on procedures or conduct of the testing, LAA Engineering should be contacted.

FLIGHT TEST DOCUMENTATION

Where an aircraft needs to undergo flight testing to investigate or verify handling and/or performance characteristics following a modification or initial build, a Certificate of Clearance (CoC) needs to be issued by LAA Engineering to authorise the flights. The CoC defines the aircraft being tested, its design standard, specific limitations for that aircraft, and records the declarations of the inspector, owner and pilot(s).

A CoC is usually valid for a period of three calendar months, after which it may be up-issued by LAA Engineering. After up-issue, the inspector, owner and pilot(s) must sign the new CoC. After completion of the flight testing, the CoC must be returned to Engineering with the flight test results/reports.

The owner of a project may also be sent flight test briefing notes specific to the task.

Note that prior to 9th May 2016, this authorisation was issued on a Permit Flight Release Certificate (PFRC). PFRCs are still used to authorise check flights on aircraft that no longer have a valid Permit to Fly (i.e. they have an expired Certificate of Validity), as part of the annual Permit revalidation process. Aircraft that were issued with a PFRC to enable testing prior to 9th May 2016 may continue to use and be re-issued with a PFRC if necessary until the end of September 2016.

GENERAL LIMITATIONS (MANDATORY)

When flying under a Certificate of Clearance, the following limitations apply:

1. The aircraft shall not fly over any assembly of persons or any congested area of a city, town or settlement, except to the extent necessary in order to take-off and land at a Government or licensed aerodrome in accordance with normal aviation practice.
2. The aircraft may only be flown within UK airspace.
3. For multi-seat aircraft, it is illegal to carry passengers on a test flight carried out under the authority of a CoC:
 - a. Only the minimum crew required for the safe operation of the aircraft may be carried in the aircraft. This may consist of a pilot and, if required, a flight test engineer/observer.
 - b. Crew, other than the pilot, may not be carried until the flying characteristics of the aircraft have been determined when flown solo, and found to be satisfactory and typical of the type.
 - c. Crew must be suitably briefed by the pilot and made aware of the fact that there is marginally more risk during a test flight than at other times.
4. Apart from permitted 'pilot maintenance' (ref TL 2.05), all work carried out on the aircraft must be inspected and 'certified' by an LAA inspector signing a Permit Maintenance Release (PMR) (ref TL 2.04). This is normally accomplished by recording the work carried out in the appropriate aircraft logbook or on separate worksheets, and signing accordingly.
5. Any changes made to the aircraft during the test period must be cleared through LAA Engineering and suitably recorded as an addendum on the flight test schedule and in the aircraft logbooks. Changes to the aircraft will usually require an inspection and the signing of a PMR.

GENERAL NOTES

1. It is essential that the pilot carrying out the flight tests is thoroughly familiar with the flight test requirements and meets the requirements of the LAA.

GENERAL NOTES AND LIMITATIONS ON TEST FLIGHTS

2. It is essential that pilots ensure that mandatory third party and (where applicable) passenger liability insurance requirements are met. Any aviation accidents or losses suffered by the pilot in the last five years (while acting as pilot) must be declared to the insurance company providing the cover, prior to flying the aircraft. This includes flying reliant on an insurance policy where the pilot is not named as an individual but qualifies under a blanket approval, for example policies which include 'any pilot nominated by the LAA or CAA for the purposes of carrying out test flying'.
3. It is strongly recommended that ballast should be used in order to comply with any prescribed loading requirements. Second crew members should not be carried merely for the purpose of acting as ballast to achieve a desired gross weight or cg position.