

Chapter A3-3 Check Flights for Issue of a National Certificate of Airworthiness or a National Permit to Fly

1 General

1.1 Check flights undertaken on Series aircraft under investigation for the issue of a National Certificate of Airworthiness or a National Permit to Fly shall comply with the procedures set out in this Chapter A3–3. In the following paragraphs, the term “check flights” refers to required aircraft evaluation flights that take place post type certification, such as for the issue of a Certificate of Airworthiness.

1.2 All operators of aircraft to be flown by a CAA Safety Regulation Group Test Pilot for any test purposes, are required to ensure that insurance policies covering damage to the aircraft and third parties are suitably endorsed to provide appropriate cover against any claims which may be made against the CAA or the Test Pilot, arising out of the test flight.

NOTE: It is understood that in general, insurers and underwriters are willing to extend the cover of their aircraft policies for this purpose, on request and without further charge.

1.3 In order that the CAA may accept reports on check flight matters, the qualifications and experience of personnel involved in check flights under the provisions of this Chapter shall be acceptable to the CAA. Check flight personnel shall be provided with adequate facilities and equipment for the effective performance of their duties.

NOTE: Organisations approved in accordance with A8–9 to fly aircraft under ‘B’ Conditions of the Air Navigation Order comply with this requirement.

1.4 Airworthiness check flights may normally be conducted under the supervision of the Type Design Organisation, Maintenance Organisation or other organisation acceptable to the CAA, provided that the pilot/flight crew are acceptable to the CAA for that purpose. All pilots conducting check flights on behalf of the CAA must have been specifically briefed and accepted to do so and must maintain recency/currency as required by the CAA. Further information on the eligibility of pilots to carry out check flights can be found in the CAA Check Flight Handbook available on the CAA website.

1.5 The CAA must be contacted prior to each required check flight. The CAA will carry out a proportion of these check flights and will audit check flight results submitted.

1.6 Further information on the conduct of check flights for continuing airworthiness management can be found in the CAA Check Flight Handbook and in CAP 562 “Civil Aircraft Airworthiness Information and Procedures”, Leaflet 1-17 “Check Flights for Continuing Airworthiness Management”, which are both available on the CAA website.

- 1.7 Responsibility for the regulation of the safety of CAA-mandated check flights of non-EASA aircraft rests with the Flight Test Section (Aircraft Certification Department) of the Airworthiness Division of the CAA. The CAA does not accept any responsibility for the use of CAA Check Flight Schedules on check flights not directly under their control.

2 Applications

- 2.1 The requirements and procedures of this Chapter A3-3 are applicable where first application is made for the issue of a United Kingdom National Certificate of Airworthiness or a National Permit to Fly in respect of a Series aircraft.
- 2.2 The CAA may decide that the requirements of paragraph 3 also be applied to imported aircraft of United Kingdom manufacture which have previously been registered in the United Kingdom.

NOTE: In making a decision the CAA will take account of the maintenance history and modification standard of the aircraft.

3 Flight Tests

- 3.1 Check flights shall be completed to establish that:

- a) handling characteristics are satisfactory and typical of the type; and
- b) climb performance equals or exceeds the scheduled data; and

NOTE: Data is necessary in order to assess any future deterioration of performance in service.

- c) the aircraft and its equipment function satisfactorily; and
- d) additional Requirements and Special Conditions, where applicable, have been complied with.

- 3.2 Series aircraft shall be tested in accordance with 3.2.1 or 3.2.2, as appropriate.

- 3.2.1 **New Aircraft Constructed in the United Kingdom.** The check flight shall be conducted under the supervision of the aircraft Type Design Organisation if applicable. The CAA may carry out a Series check flight on a sample of the aircraft in order to monitor the standard.

- 3.2.2 **Re-imported Aircraft.** Where the aircraft type and origin are well known to the CAA, the check flight may be devolved to the Applicant (or importing agents or operators), provided that the pilot has been associated previously with CAA check flights on aircraft of the same, or closely similar, type. However, the CAA retains overall responsibility and may notify the Applicant of its intention to carry out, or participate in, check flights.

NOTE: Where the CAA has notified the Applicant of its intention to carry out, or participate in, check flights, the Applicant shall, when requested, provide adequate opportunities for the CAA to become re-familiar with the aircraft type.

- 3.3 Where check flights are carried out other than by the CAA, a check flight report, in a form acceptable to the CAA, shall be provided. The CAA may require any of the checks to be repeated, either by the Applicant or by the CAA.

4 Check Flight Schedules

- 4.1 **New Aircraft.** The manufacturer's check flight (see paragraph 3.2.1) shall be made to a Production Check Flight Schedule agreed by the CAA. Where the CAA carries out a sample Series check flight, the Check Flight Schedule will be prepared in accordance with paragraph 4.2.

- 4.2 **All Other Aircraft.** The check flight shall be made to the CAA Airworthiness Check Flight Schedule for the type (see paragraph 4.3), or to such other schedule as may be agreed by the CAA. Such a schedule shall contain details of the aircraft type to which it refers, shall be marked with a reference number, issue number, and date, and shall include the following:

- a) Tests to check the aircraft performance;
- b) Tests to check such handling qualities of the aircraft as have been agreed in consultation with the CAA:

NOTE: It is convenient for the flight test schedule to contain the following handling tests, as these combine, in a brief form, checks on various flight characteristics.

- i) a qualitative assessment of the take-off;
 - ii) an assessment of the trim of the aircraft and the effectiveness of primary flight controls and trimmers in steady flight;
 - iii) hover manoeuvres for helicopters;
 - iv) flight at maximum speed;
 - v) stalls in the take-off and landing configurations;
 - vi) a qualitative assessment of the landing;
- c) Tests to check functioning of the aircraft equipment in flight;
 - d) Such other tests as are requested by the CAA.

NOTE: Controls, systems and equipment which are used regularly may be considered, for the purpose of this schedule, to have been checked on the basis of normal usage.

4.3 Check Flight Results

- 4.3.1 The check flight results, in a form acceptable to the CAA, shall be submitted for acceptance as follows:

- a) In respect of an aircraft to which Chapter A3-1 is applicable, either:

- i) to the continuing airworthiness management organisation or the Chapter A8-15 M3 organisation, as appropriate, in support of the Airworthiness Review in accordance with Chapter A8-25, Section 10. Once accepted by that organisation, the results shall be forwarded to the CAA for record purposes; or
 - ii) in the case where the CAA itself carries out the Airworthiness Review and the Certificate of Airworthiness and NARC are issued by the CAA in accordance with Chapter A3-1 paragraph 10.8.1, to the CAA.
- b) In respect of an aircraft to which Chapter A3–7 is applicable, either:
- i) to the organisation that is supervising the Permit to Fly and is approved to make recommendations to the CAA concerning the issue of a Permit to Fly and Certificate of Validity. Once accepted by that organisation, the results shall be forwarded to the CAA for record purposes; or
 - ii) in the case where the CAA itself carries out the Airworthiness Review and then issues the Permit to Fly and Certificate of Validity, to the CAA.
- 4.3.2 The check flight result shall include a certificate which shall be signed by the pilot who conducted the flight. The certificate, which forms page 1 of the CAA check flight schedule, shall record any defects found and identify the process by which they will be investigated and rectified.