

**15/2009**

**Applicability: Operators of, and Maintenance Organisations Responsible for, Performance Class A Aeroplanes**

## **CHECK FLIGHTS CARRIED OUT BY OPERATORS**

### **1 Introduction**

- 1.1 In a recent incident involving a Boeing 737-700 aircraft, control of the aircraft was temporarily lost during a Check Flight following maintenance. The loss of control occurred during a manual reversion check of the flying controls. The purpose of this FODCOM is to provide guidance to operators, Part M Subpart G Continuing Airworthiness Maintenance Organisations (CAMOs) and maintenance organisations on the management of, and pilot/observer training for, Check Flights.
- 1.2 Operators, CAMOs and maintenance organisations should also refer to [Airworthiness Communication 2009/03](#).

### **2 Definitions**

#### **2.1 Check Flights**

- a) **Check Flight.** A post-certification flight carried out as one of the processes to ensure that the aircraft continues to comply with the applicable airworthiness requirements.
- b) **Elective Check Flight.** A Check Flight required by the operator, e.g. to fulfil part of the end of lease conditions.
- c) **Maintenance Check Flight.** A Check Flight carried out after maintenance on an aircraft to provide reassurance of performance or establish the correct functioning of a system that cannot be fully established during ground checks.
- d) **Mandated Check Flight.** A Check Flight mandated by the CAA mainly associated with the issue of a Certificate of Airworthiness (C of A) for used aircraft imported from outside the European Union. The regular Check Flights mandated by the CAA have been discontinued.

- 2.2 **Test Flight.** A pre-certification flight, usually carried out by the manufacturer. Test Flights are not dealt with in this FODCOM.

### **3 Check Flight Schedules**

#### **3.1 Mandated Check Flights**

- 3.1.1 For Check Flights mandated by the CAA, the CAA Flight Test Section will be responsible for, and provide, the appropriate Check Flight Schedule (CFS).

#### **3.2 Maintenance and Elective Check Flights**

- 3.2.1 For all Maintenance and Elective Check Flights, the operator should provide a detailed CFS specifying and detailing the functions and tests that are to be performed, and the flight conditions that need to be satisfied for each part of the Check Flight. The schedule should include forms to record the required data. The detailed CFS will always be the responsibility of, and under the control of, the operator, agreed with the operator's CAMO and, where necessary, in liaison with the applicable maintenance organisation. The CAA can provide CFSs for some types (see paragraph 3.2.4).
- 3.2.2 For a Maintenance Check Flight, the CFS will be determined by the functions and tests required by the maintenance organisation in conjunction with the CAMO. It should be noted that maintenance data may

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specify the functions and tests that need to be performed during Maintenance Check Flights and the flight conditions required to enable the flight to be safely and properly conducted. It is important that the operator ensures that they obtain all relevant information of this type, and that the flight crew who will conduct the flight are provided with the information and briefed accordingly.

- 3.2.3 For both Elective and Maintenance Check Flights, where only checks for functionality of equipment used by crew during routine operations are required, the schedule may consist of a simple list of checks to be performed, the order of the checks and the required flight conditions. Where the checks require operation outside normal Standard Operating Procedures (SOPs), elements of the CAA CFS should be used to construct the CFS, with the relevant conditions appertaining. Any additional elements outside the scope of this schedule should be discussed with the [CAA Flight Test Section](#).
- 3.2.4 CAA CFS can be found using the following link: [Check Flight Schedules](#). It is the responsibility of the operator to ensure that the checks and limitations on the CFS are correct for the aircraft under check. The prime source of information is the Aircraft Flight Manual, and in the event of conflict this should be taken as overriding.
- 3.2.5 Where no CAA CFS exists, or there is doubt about the applicability of a particular CFS, [CAA Flight Test Section](#) should be contacted.

## 4 Acceptability of Crews Performing Check Flights

4.1 A pilot manager should be responsible for Check Flight activities. The operator should maintain a list of eligible pilots and procedures for conducting Check Flights in the Operations Manual. The criteria for nomination as a pilot permitted to conduct check flights should be included.

4.2 The pilot in command of the Check Flight should ensure that the crew is suitable for the task and adequately instructed.

### 4.3 Mandated Check Flights

4.3.1 For a Mandated Check Flight, the pilot signing the Check Flight Report has to be acceptable to the CAA Flight Test Section. The CAA may require its personnel to participate in the Check Flight.

### 4.4 Maintenance and Elective Check Flights

4.4.1 The competency of crews performing Maintenance and Elective Check Flights, and the procedures for conducting them, are the responsibility of the operator.

4.4.2 Where the flight is within the operator's normal SOPs, the operator may declare selected line crews acceptable to conduct the Check Flight, following comprehensive briefings by the responsible flight operations manager. In all other cases the crew should be acceptable to the CAA. The guidelines for eligibility for Check Flights are outlined in the [CAA Check Flight Handbook](#). The CAA Flight Test Section will determine the instruction required for the pilot in command and will assist with its accomplishment where possible.

4.4.3 The pilot in command should be given such instruction for each individual type for which he is authorised to carry out Check Flights.

## 5 Preparation for, and Conduct of, the Check Flight

5.1 The preparation for, and conduct of, all Check Flights should be carried out in accordance with the CAA Check Flight Handbook and the relevant CAA CFS, bearing in mind the following:

- Preparation of the aircraft for, and recovery from, a Check Flight is the responsibility of the CAMO and, where applicable, other maintenance organisations.
- The operator will be responsible for ensuring that its crew thoroughly understand the CFS, the techniques to be used, the flight conditions required and all other aspects of the conduct of the flight.
- If deemed necessary by the operator, practice in the simulator or other training will be carried out.

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- Prior to any Check Flight, a full pre-brief should be conducted between the CAMO, maintenance organisation and flight operations, during which the flight crew should be made aware of the specific reasons for the Check Flight. In particular, specific note should be made of any maintenance tasks that have a direct effect on the aircraft's handling or performance. The briefings should include details of the data to be recorded, and the requirement to accurately record any defects or requests for maintenance.
- During the Check Flight, all test results and defects should be suitably recorded using the CFS and the Aircraft Technical Log (ATL) as appropriate.
- After the Check Flight, a full and formal debrief should be conducted by the flight crew to the operator, CAMO and maintenance organisation. This debrief should be recorded in writing to avoid any subsequent confusion. Copies of the relevant Check Flight reports and ATL pages should be provided to the maintenance organisation at this time. Any request for further maintenance, whether it is an observation or a reported defect, should be agreed with all parties and transcribed accurately onto a written works order immediately after the Check Flight.
- The briefing records and Check Flight report should be appended to the aircraft records.
- Responsibility for the safe conduct of the flight remains with the commander.
- Additionally, for a CAA-Mandated Check Flight, the CAA Flight Test Section will liaise with the operator, CAMO and maintenance organisation to define responsibilities and requirements, and any variation to the above.

## 6 Responsibilities

6.1 Responsibilities for various aspects of the different types of Check Flight are as follows:

- The decision as to when Maintenance Check Flights should be conducted resides with the operator's CAMO, where necessary in liaison with the applicable maintenance organisation.
- The decision to carry out an Elective Check Flight resides with the operator, but should involve the CAMO and, where necessary, applicable maintenance organisation.
- For Maintenance and Elective Check Flights, the selection and competency of crew and the content of the CFS are the responsibility of the operator.
- The responsibility for the conduct of the flight rests with the commander.
- Where any doubt exists or advice is required, the [CAA Flight Test Section](#) should be contacted.
- For Air Operator Certificate operators intending to carry out Maintenance or Elective Check Flights, the first point of contact with the CAA is their assigned Flight Operations Inspector.

## 7 Recommendation

7.1 **Operators and maintenance organisations should review their guidance to staff involved in the planning of, preparation for, execution of and follow-up to check flights. Procedures and guidance should be amended to conform to the advice in this FODCOM.**

## 8 Queries

8.1 Any queries as a result of this FODCOM should be addressed to Head of Flight Operations Policy Department at the following e-mail address: [FOP.Admin@caa.co.uk](mailto:FOP.Admin@caa.co.uk).

17 April 2009

***Recipients of new FODCOMs are asked to ensure that these are copied to their 'in house' or contracted maintenance organisation, to relevant outside contractors, and to all members of their staff who could have an interest in the information or who need to take appropriate action in response to this Communication.***

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