

United Kingdom Overseas Territories Aviation Circular

OTAC 39-20

Aircraft Technical Logs

Issue 1.00
6 May 2022

Effective: on issue

GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

This Overseas Territories Aviation Circular provides information and guidance on the format and construction of Aircraft Technical Logs.

RELATED REQUIREMENTS

This Circular relates to OTAR Part 39 Subpart (39.79).

CHANGE INFORMATION

First issue.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website www.airsafety.aero or to the appropriate Overseas Territory Aviation Authority.

CONTENTS

1. GENERAL3
2. APPROVAL OF THE AIRCRAFT TECHNICAL LOG AND ITS AMENDMENTS.....3
3. CONTENT OF THE TECHNICAL LOG SYSTEM.....3
4. FORMAT OF THE TECHNICAL LOG SYSTEM5

1. General

- (a) The Aircraft technical log is also known as the “tech” log or logbook.

The aircraft technical log is the primary source for technical and operational data on each flight that occurs. This data includes defects and malfunctions, block times and fuel consumption. It also records all maintenance carried out on an aircraft between scheduled base maintenance visits.

2. Approval of the Aircraft Technical Log and its Amendments

- (a) The initial issue of the aircraft technical log system should be approved by the competent authority of the State of the Operator. This may be accomplished by the approval of the Maintenance Control Manual where the format is shown and depicted.
- (b) Any subsequent amendment to the technical log system should also be approved by the competent authority of the state of the operator.

3. Content of the Technical Log System

- (a) For Commercial Air Transport operations, the aircraft technical log is a system for recording defects and malfunctions during the aircraft operation and for recording details of all maintenance carried out on an aircraft between scheduled base maintenance visits.

In addition, it is used for recording flight safety and maintenance information that the operating crew need to know.

- (b) Cabin or galley defects and malfunctions that affect the safe operation of the aircraft or the safety of its occupants are regarded as forming part of the aircraft logbook system, when recorded by another means.
- (c) The aircraft technical log system may range from a simple single-section document to a complex system containing many sections but in all cases, it should include the information specified as per the example used here which happens to use a 5-section document/computer system. The Sections are defined below:
- (1) **Section 1** should contain details of the registered name and address of the operator the aircraft type and the complete international registration marks of the aircraft.
 - (2) **Section 2** should contain details of when the next scheduled maintenance is due, including, if relevant, any out of phase component changes due before the next maintenance check. In addition, this section should contain the current Certificate of Release to Service (CRS), for the complete aircraft, issued normally at the end of the last Scheduled Maintenance Inspection (SMI).

NOTE: The flight crew do not need to receive such details if the next scheduled maintenance is controlled by another means acceptable to the competent authority.

- (3) **Section 3** should contain details of all information considered necessary to ensure continued flight safety. Such information includes:
- (i) the aircraft type and registration mark,
 - (ii) the date and place of take-off and landing,
 - (iii) the times at which the aircraft took off and landed,
 - (iv) the running total of flying hours, such that the hours to the next scheduled maintenance can be determined. The flight crew does not need to receive such details if the next scheduled maintenance is controlled by another means acceptable to the competent authority.
 - (v) details of any failure, defect or malfunction to the aircraft affecting airworthiness or safe operation of the aircraft including emergency systems, and any failure, defect or malfunctions in the cabin or galleys that affect the safe operation of the aircraft or the safety of its occupants that are known to the commander. Provision should be made for the commander to date and sign such entries including, where appropriate, the nil defect state for continuity of the record. Provision should be made for a CRS following rectification of a defect or any deferred defect or maintenance check carried out. Such a certificate appearing on each page of this section should readily identify the defect(s) to which it relates or a scheduled maintenance inspection as appropriate.

In the case of maintenance performed by an OTAR Part-145 maintenance organisation, it is acceptable to use an alternate abbreviated certificate of release to service consisting of the statement 'OTAR 43.105(a) release to service' instead of the full certification statement specified in OTAR 43.105(a). Where the alternate abbreviated certificate of release to service is used, the introductory section of the technical log should include an example of the full certification statement from OTAR 145.
 - (vi) the quantity of fuel and oil uplifted and the quantity of fuel available in each tank, or combination of tanks, at the beginning and end of each flight; provision to show, in the same units of quantity, both the amount of fuel planned to be uplifted and the amount of fuel actually uplifted; provision for the time when ground de-icing and/or anti-icing was started and the type of fluid applied, including mixture ratio fluid/water and any other information required by the operator's procedures in order to allow the assessment on whether inspections for and/or elimination of de-icing/anti-icing fluid residues that could endanger flight safety are required.
 - (vii) the pre-flight inspection signatures.
 - (viii) In addition to the above, it may be necessary to record the following supplementary information:
 - the time spent in particular engine power ranges, where use of such engine power affects the life of the engine or engine module.
 - the number of landings where landings affect the life of an aircraft or aircraft component.
 - flight cycles or flight pressure cycles where such cycles affect the life of an aircraft or aircraft component.

Note 1: Where Section 3 is of the multi-sector 'part removable' type, then such 'part removable' sections should contain all the foregoing information where appropriate.

Note 2: Section 3 should be designed so that one copy of each page may remain on the aircraft and one copy may be retained on the ground until completion of the flight to which it relates.

Note 3: Section 3 layout should be divided to show clearly what is required to be completed after flight and what is required to be completed in preparation for the next flight.

- (4) **Section 4** should contain details of all deferred defects that affect or may affect the safe operation of the aircraft and should therefore be known to the aircraft commander. Each page of this section should be pre-printed with the operator's name and page serial number and make provision for recording the following:
- (i) a cross reference for each deferred defect such that the original defect can be identified in the section 3 sector record page.
 - (ii) the original date of occurrence of the defect deferred.
 - (iii) brief details of the defect and the authority to defer (such as MEL reference).
 - (iv) details of the eventual rectification carried out and its CRS or a clear cross-reference back to the document that contains details of the eventual rectification.
- (5) **Section 5** should contain any necessary maintenance support information that the aircraft commander needs to know. Such information will include data on how to contact maintenance if problems arise whilst operating the routes etc.

4. Format of the Technical Log System

- (a) The aircraft technical log system can be either a paper or computer system or any combination of both methods acceptable to the competent authority.
- (b) In the case of a computer system, it should contain programme safeguards against the ability of unauthorised personnel to alter the database and safeguards to ensure the preservation of electronic records within the computer system. OTAC 39-21, 145-19 pertaining to electronic signatures, records and manuals contains further information on electronic storage systems.