

KINGDOM OF BAHRAIN  
Ministry of Transportation  
and Telecommunications



مملكة البحرين  
وزارة المواصلات والاتصالات

# **CIVIL AVIATION PUBLICATION**

## **CAP 36**

### **AIRCRAFT MAINTENANCE LOG SYSTEM**

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### CAP 36

## AIRCRAFT MAINTENANCE LOG SYSTEM

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### REVISION RECORD

#### CAP 36 AIRCRAFT MAINTENANCE LOG SYSTEM

Revision No.	Date of Issue
Initial Issue	07 February 2024



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### AIRCRAFT MAINTENANCE LOG SYSTEM

#### 1. Introduction

- a. Article 38 of Civil Aviation Law 14 of 2013 requires furnishing of details as required by the respective regulation on the Aircraft Technical Log System and Article 43 requires carriage of Aircraft Technical Logbook / Journey Logbook onboard the aircraft while performing aircraft maintenance and operations.
- b. Further Article 88 requires that flight risks and defects & malfunctions are recorded on the Aircraft Technical Log System.
- c. ANTR M.A.305 (Aircraft continuing airworthiness record system) and its AMCs / GMs, stipulates requirements of logbooks (Aircraft Logbook, Engine Logbook(s), Engine Module Log Cards, Propeller Logbook(s), Propeller Log Cards as applicable and the details to be furnished therein.
- d. Following are the type of documents (not limited to) identified under the Aircraft Technical Log System:
  - i. Aircraft Logbook
  - ii. Engine Logbook for each engine installed in the aircraft.
  - iii. A propeller Logbook for every variable pitch propeller installed in the aircraft (if applicable).
  - iv. A Radio Apparatus Logbook, for aircraft fitted with radio apparatus (Airframe Logbook can be used for making the entries pertaining to Radio Apparatus)
  - v. Any other logbook required by the BCAA.
- e. The ANTR M.A.305 requires that,
  - (1) At the completion of any maintenance, aircraft certificate of release to service (CRS) required by ANTR 145.A.50, as applicable shall be entered in the aircraft continuing airworthiness records system, as soon as practicable and no later than 30 days after the completion of any maintenance.
  - (2) The aircraft continuing airworthiness records system shall contain the following;
    - (i) an aircraft logbook, engine logbook(s) or engine module log cards, propeller logbook(s) and log cards, for any service life limited component as appropriate, and
    - (ii) the aircraft type and registration mark date of the entry, the total in-service life (hours, calendar time, cycles and landings), of all service life-limited components, accumulated in the applicable parameter for aircraft, engine(s) and/or propeller(s);

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- (iii) the aircraft continuing airworthiness records described in points (3) and (4) below together with the supporting detailed maintenance records described in point (5) below.
  - (iv) if required by point M.A.306, the aircraft technical log.
- (3) The aircraft continuing airworthiness records shall include the current mass and balance report and the current status of:
- (i) ADs and measures mandated by the competent authority in immediate reaction to a safety problem;
  - (ii) modifications and repairs;
  - (iii) compliance with the AMP;
  - (iv) deferred maintenance tasks and deferred defects rectification.
- (4) The aircraft continuing airworthiness records shall include the current status specific to components of:
- (i) life-limited parts, including the life accumulated by each affected part in relation to the applicable airworthiness limitation parameter; and
  - (ii) time-controlled components, including the life accumulated by the affected components in the applicable parameter, since the last accomplishment of scheduled maintenance, as specified in the AMP.
- (5) In pursuant to the Para (e)(2) to (e)(4) above, the operator shall ensure that a system has been established for
- (i) the CRS and detailed maintenance records:
    - (1) demonstrating compliance to ADs and measures mandated by authority in immediate reaction to a safety problem applicable to aircraft, engine(s), propeller(s) and components fitted thereto, as appropriate until such time as the information contained therein is superseded by new information equivalent in scope and detail but covering a period not shorter than 36 months after the aircraft or component has been released to service, or permanently withdrawn from service; and
    - (2) demonstrating compliance with applicable data in accordance with M.A.304 for current modification and repair to the aircraft, engine(s) propeller(s) and any component subject to airworthiness limitations and
    - (3) of all scheduled maintenance as per maintenance programme or other maintenance required for continuing airworthiness of aircraft, engine(s), propeller(s), as appropriate



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untill such time as the information contained therein is superseded by new information equivalent in scope and detail but covering a period not shorter than 36 months.

- (ii) data specific to certain components:
- (1) an in-service history record for each life-limited part based on which the current status of compliance with airworthiness limitations is determined;
  - (2) the CRS and detailed maintenance records for the last accomplishment of any scheduled maintenance and any subsequent unscheduled maintenance of all life-limited parts and time-controlled components until the scheduled maintenance has been superseded by another scheduled maintenance of equivalent scope and detail but covering a period not shorter than 36 months;
  - (4) All entries made in the aircraft continuing airworthiness records system shall be clear and accurate. When it is necessary to correct an entry, the correction shall be made in a manner that clearly shows the original entry and counter signed (with affixing his stamp of designation / signatory details) by the person responsible making such correction.
- f) The format of aircraft maintenance log system and any subsequent amendment shall be approved by BCCA.
- g) An operator shall ensure that the aircraft maintenance logs are retained for the respective period stipulated in ANTR M.

### 2. Purpose

The Purpose of this procedure is to provide guidance to the operator in preparation of Aircraft Maintenance Log System and BCAA Inspectors in order to ensure that the Operator Log System / Books are standardized to meet the requirements of ANTR M.

### 3. Format of Maintenance Logbook / System

The contents of Maintenance Logbook or an equivalent document / system should meet the requirements of ANTR M

The Logbooks shall have the particulars such as but not limited to the following provided in the title page of the Logbooks:

- the name of the manufacturer,
- the type of the aircraft,
- the number assigned to it,
- by the manufacturer and
- the date of the manufacture of the aircraft,
- the nationality and registration marks of the aircraft,

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- Aircraft/ engine to which fitted,
- the name and address of the operator of the aircraft,

### 4. Aircraft, Engine, Propeller and Radio Apparatus Logbook

An aircraft logbook, engine logbook(s) and propeller logbook(s) are part of the aircraft continuing airworthiness records, a manufacturer in respect of each newly manufactured aircraft; engine or propeller may issue a logbook along with the release documents. If he does not, then the owner/ operator may raise a logbook or an equivalent document system on his own with the approval of BCAA. Each such logbook shall preferably have different sections to record the details required by ANTR M, M.A.305 and its AMCs / GMs.

4.1 The first section will contain records of

- a) Hours / Cycles date wise,
- b) All routine inspection/maintenance, including "Certificate of Release to Service" inspection and higher checks carried.
- c) Test flight
- d) Minor repairs and certification thereof,
- e) Further information such as,
  - i. The date of flight,
  - ii. Total flight time since manufacture,
  - iii. Time since last overhaul/major inspection, number of landings/cycles, etc.

*Note: The routine inspections mentioned in the Logbook may be identified by an identification number mentioned on the routine inspection sheet.*

4.2 The second section will consist of differently colored sheets, ruled horizontally. Each page will bear the caption, namely, "Replacement, Major Repairs & Overhaul". A detailed report of the Replacement, Major Repairs & Overhaul done under these headings shall be certified in this section.

*Note: Major repair signifies a repair to a damage, which would affect the safety of the aircraft or the safety of persons on board.*

4.3 The third section will consist of a set of still differently colored pages also horizontally ruled, and each page will bear the heading, namely, 'Modification Record'. Details of the modifications/service bulletins including mandatory modification(s) complied with and certified should be recorded along with date and time of compliance in this section.

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- 4.4 A total mandatory modifications status of the aircraft, engine and its components shall be reflected even though they are not applicable. All the Pages of a Logbook shall be serially numbered. Also, each logbook should be serially numbered or in the case of equivalent system it shall show the continuity and traceability.
- 4.5 The entries in the respective logbook or equivalent system shall be made within 30 days of the completion of the work.
- 4.6 The entries in the logbook or the equivalent system shall be certified by the respective certifying staff, or a person specifically authorized for this purpose.
- 4.7 If the logbook or the equivalent system is digitalized / computerized, it shall demonstrate the accuracy of the system and procedure for creating backups to the satisfaction of BCAA. It shall also contain programme to safeguard against unauthorized entries (making and / or altering) and the database. The procedure of using computerized records shall be documented in the MOE and its exposition procedures.

The Maintenance logbook / system format can be designed by the operator to the best suited way to accommodate all of the above applicable information and submitted to BCAA for acceptance.

The operator shall establish a proper record keeping area for the Logbooks / systems (running logbooks and the Logbooks in use) with a facility to secure them in all respect such as Physical, fire, flood, theft, etc.

The Checklist attached as Appendix 1 is required to be submitted to BCAA along with the draft format of the proposed Technical Log for acceptance.

### **5. Logbook / System Entries**

The logbook / system entries are required to be made by the certifying personnel who actually carried out the maintenance or by a person specifically authorized for the said purpose.

In the case where the Logbook / system entries are made by the authorized persons, the operator's procedure shall document the requirements of qualification, experience, assessment and management of authorization (along with limitations if any).

The CAME / CAME Procedures shall describe the procedure for maintenance of logbooks and its management including that of the entry management, entry sanctity & data security, requirement of authorized persons for etc.

### **6. Evaluation and acceptance process**

The format shall be evaluated by the BCAA to ensure that the Maintenance Logbook / System contains the information applicable to the operator's aircraft and its continuing airworthiness & maintenance requirements. The checklist submitted by the operator should be assessed by the inspector to ensure its completeness and correctness.

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When satisfied with the format and contents of the Operator Maintenance logbook / systems, the same will be accepted for the use by operator.

BCAA will retain a copy of the accepted Log system in the record keeping system.

The Operator shall indicate the revision numbers and their effective date in their records maintenance system.

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### Appendix 1

#### Checklist –Maintenance Logbook

This checklist required to be submitted by the operator while proposing the Maintenance Logbook format and its subsequent amendments.

Item No.	Description	Policy / Procedure Reference	Remarks if any	BCAA
1	Is policy / procedure existing with operators on the maintenance of logbooks.			
2	Are the details of information as required by M.A.305 and its AMC / GM addressed?			
3	Is Procedure existing for identification of Logbooks and the pages therein in each Logbook?			
4	Is the Operators procedure describing the requirement of qualification, experience, training, and authorization of personnel for making logbook entries and certification of those entries?			
5	Is the Operators procedure describing the requirement of time period within which the entries are made in the logbook?			
6	Is the Operators procedure describing the requirement for error management on the entries made?			
7	Is the Operators procedure describing the requirement of preservation period of various logbooks?			
8	Is the operator's procedure describing the requirements for generation of duplicate Logbook in case of loss of Original Logbook(s)?			
9	Has the provision made to reflect the BCAA approval reference in the Logbook?			
10	If the Operators Logbook system is established through electronic / digital form, what is provision incorporated for data entry and its validation & authorization, data protection, security, preventing unauthorized entries, error management etc.?			

Name of the Post holder Proposing:

Signature of the Post Holder Proposing with Date:

Name of the Inspector examined:

Signature of the Inspector examined with Date: