



# ADVISORY CIRCULAR

**CAA-AC-AWS008**

**November 2022**

## **AIRCRAFT MAINTENANCE PROGRAMME - COMMERCIAL AIR TRANSPORT**

### **1.0 PURPOSE**

This advisory circular is issued to provide guidance information on the regulatory requirements that relate to preparation of a maintenance program for an aircraft engaged in commercial air transport. The Circular gives general information and explains procedures that guides an Operator to prepare an acceptable aircraft maintenance program.

### **2.0 REFERENCES**

- a) Regulation 66 of the Civil Aviation (Air Operator Certification and Administration) Regulations, 2022.
- b) Regulation 58 of Civil Aviation (Operation of Aircraft) (Commercial Air Transport) (General Aviation) ( Helicopters) Regulations, 2022.
- c) Regulation 184 of Civil Aviation (Operation of Aircraft- Commercial Air Transport-Aeroplanes) Regulations, 2022
- d) Regulation 30 of the Civil Aviation (Airworthiness of Aircraft) Regulations, 2022

### **3.0 GUIDANCE AND PROCEDURE**

#### **3.1 Maintenance Program**

**3.1.1** Means a document which describes the specific scheduled maintenance tasks, their frequency of completion and related procedures, such as a reliability program,

**3.1.2** The requirements of an approved maintenance program apply to all aircraft registered in Uganda. The air operator should present the maintenance program applicable to the aircraft operation in question to the Authority for approval.

**3.1.3** AOC holders continuing airworthiness responsibilities. – **Includes** making maintenance arrangements with an approved maintenance organisation or a licensed aircraft maintenance engineer for the performance of any maintenance, preventive maintenance or modifications but remains responsible for all work performed under the arrangement and ensures that owner of an aircraft, or in the case where it is leased, the lessee, shall ensure that the certificate of airworthiness of the aircraft remains valid in accordance with procedures acceptable to the Authority and to ensure that each aircraft released to service is airworthy.

## **3.2 Maintenance Program Requirements**

**3.2.1** The aircraft maintenance program should be based on aircraft maintenance information made available by the State of Design or by the organization responsible for the type design. For large aero plane, this information is normally issued in the form of a maintenance review board report for the particular aircraft type, for small aircrafts it is normally included in the aircraft maintenance manual.

**3.2.2** Air operator should utilize relevant, current manufacturer’s recommended maintenance program time intervals and maintenance processes as he or she develops a maintenance program.

**3.2.3** Deviations from the manufacturer’s recommended maintenance practices, time intervals and maintenance processes must be authorised by the Authority but only after the air operator has presented acceptable justification.

### **Note:**

i) *Scheduled maintenance intervals may be extended under the Quality Management system on request up to 10% only of the prescribed period, however the extension shall be subtracted from the next maintenance interval.*

ii) *The Authority should be notified any time any variation is applied.*

**3.2.4** Where the operations include EDTO, it is required that the operator takes account of the special requirements of EDTO. The EDTO maintenance program provides standards, guidance and direction necessary to support the intended operations. Maintenance personnel involved should be aware of the special nature of EDTO and they should have the knowledge, skills and ability to accomplish the requirements of the program.

**3.2.5** In addition to the requirement for an approved maintenance programme, for aircraft operated by an AOC holder, an aircraft with maximum certificated take-off mass authorised above 13,310 kg shall include a reliability programme in the maintenance programme.

### 3.3 Maintenance Program Contents

3.3.1 An approved maintenance program should include at least the following:

- a) Maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aircraft.
- b) Continuing structural integrity and corrosion control program.
- c) Procedures for changing or deviating from the established standards.

*Note: Any approved extension to schedule maintenance inspection should be deducted from the next inspection interval period.*

- d) Where applicable, condition monitoring and reliability program descriptions for aircraft systems, components and power plants.
- e) The maintenance certificates to be issued for the maintenance functions.
- f) The persons authorized to sign the maintenance release certificates.
- g) Life-limited items and components control system.
- h) Unscheduled Maintenance. e.g.
- i) Mechanical irregularities occurring during flight time, such as hard landings, overweight landings, lightning strike or crew observed operation and function defects.
- j) Inspection irregularity findings: structural, mechanical, operational and functional.
- k) Maintenance functions (e.g. component removal, replacement, and system adjustments) that may require carrying out a pre certification test flight to ensure safe performance and operation.
- m) Performance test flight schedule for the maintenance functions that require pre-certification flight testing.
- n) Critical Maintenance Inspection Items that require a duplicate inspection; these include, but not limited to:
  - a) Installation, rigging, and adjustments of engine and flight controls.
  - b) Installation and repair of major structural components.
  - c) Installation of aircraft engines, propellers, and rotors.
  - d) Calibration, or rigging of components such as engines, propellers,
  - e) Transmissions, gearboxes, and navigation equipment.

- o) **Off -wing Aircraft Maintenance** – Overhaul and Repair of Engine, Propeller, and Appliance  
whether scheduled or unscheduled, may be independent from maintenance performed on the aircraft, however, the tasks shall be performed in accordance with the procedures approved by the authority, and in compliance with the current manufactures’ instructions and standards.

**Notes:**

- (i) *It is required to develop independent Inspection Check List or Work Package task cards for each scheduled periodic maintenance check (e.g. Daily Inspection Check List, 200hrs. Inspection Work Package task cards etc), with the details and depth of the required inspection which shall be used by the maintenance personnel when performing the inspection tasks, and where applicable indicate the relevant maintenance manual reference.*
- (ii) *The inspection check lists or task cards shall in addition have provisions for the mechanic and the authorised engineer’s signature to certify completion of the task.*
- (iii) *To minimize Scheduled maintenance records paperwork, a separate signature sheet that references the specific periodic inspection, the check list or task card item and the applicable aircraft registration may be used.*
- (iv) *The certified inspection signature sheets shall form part of the aircraft maintenance inspection records.*

**3.4 Application of the Approved Maintenance Program** – Instructions, standards and procedures to be followed when applying the provisions of the approved maintenance program, including the recording of scheduled and unscheduled maintenance should be defined in the operator’s Maintenance Control Manual (MCM).

**3.5 Maintenance Organisation** – The approved maintenance program functions must be carried out at a Approved Maintenance Organisation.

**3.6 Release to Service**

**3.6.1** The aircraft should be released to service by a Maintenance Organisation approved by the Authority.

**3.6.2** A person approving the release to service of an aircraft or aircraft component after any inspection performed in accordance with the approved maintenance program, shall make entries on the certificate of release to service and or in the maintenance record of that equipment.

**3.6.3** The operator should maintain a listing of persons authorized to release the aircraft to service after maintenance even when some of the maintenance is subcontracted to other organizations. The authorized signatories should be identified by name, occupational title, and the authorization limitation.

### **3.7 Approval Process**

- 3.7.1** The maintenance program should be submitted to the Authority for approval.
- 3.7.2** The maintenance program is evaluated and when the Authority is satisfied with the program the list of effective pages is stamped and signed approved and returned to the operator. A copy of the approved program will be retained by the Authority.
- 3.7.3** In the case of foreign registered aircraft a maintenance program is approved by the State of Registry and then evaluated and accepted by the Authority if satisfactory.
- 3.7.4** In case of discrepancies, a notice listing specific discrepancies found and recommendations, outlining what will be required to correct the discrepancies is issued to the operator.



**Uganda Civil Aviation Authority**