PRESENTATION ON AIRCRAFT MAINTENANCE MANUAL



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DEFINITION OF AIRCRAFT MAINTENANCE MANUA

The formal document which details the way in which all maintenance tasks carried out on an aircraft shall be accomplished. This includes items such as lubrication system, functional checks and servicing of the airplane but usually excludes structural repairs and modifications.



USES OF AMM

- It provides instructions and drawings for maintenance procedures.
 - Provides instructions for function checks as well as required results.
- Provides reference drawing and charts for specific system operations.
- Provides descriptions of that specific aircraft's abbreviations.

MANUAL DESCRIPTION

Aircraft Maintenance Manual is prepared in accordance with specification, which provides instructions for preparation and publication of manuals for general aviation aircraft.





- INTRODUCTION
- 1" PART SYSTEMS DESCRIPTION
- 2nd PART OPERATING PROCEDURES
- 3rd PART PERFORMANCE

ARRANGEMENTS OF CHAPTERS

Chapters in this manual are arranged and divided in accordance with Specification.

Chapters are arranged in the following groups:

- INTRODUCTION (Chapter 01)
 - AIRCRAFT (Chapters 04 to 12)
 - AIRFRAME SYSTEMS (Chapters 20 to 39)
 - AIRFRAME (Chapters 51 to 57)
 - PROPELLER (Chapter 61)
 - POWER PLANT (Chapters 71 to 79)

NUMBERING OF CHAPTERS

Example:

27 – 20 Sub-chapter (Rudder) Chapter

(Flight Controls)

NUMBERING OF PAGES, FIGURES AND TABLES

Numbering of pages: (1) Example: Page 27 - 11 Page No. Chapter No. Numbering of figures: (2)Example: Fig. 27 - 1 Figure No. Chapter No. Numbering of tables: (3)Example: Tab. 27 - 1 Table No. Chapter No.

PART 1 OF AMM SYSTEM DESCRIPTION SECTION

- The system description is intended to help auditors understand the overall organization and evaluate its internal controls;
- Our organization is using the proper controls
- These controls are operating effectively
- There are no gaps in the controls used
- Our controls have no negative effects on our customer's financial statements.

ELEMENTS OF STRONG DESCRIPTION FOR AMM

Services included
Relevant Control objective
Entity level Control component
Key system elements
Subservice organisation



PART 2 OF AMM

MAINTENANCE PRACTICES

The effectiveness of an inspection system depends to a great extents on how well the inspection and maintenance has been planned, for maintaining an aircraft in airworthiness condition it is necessary to subject an aircraft and components to approved maintenance schedule inspection, periodic inspection as approved by D.G.C.A

MAINTENANCE PROGRAM

It is a document which describes the specific schedule maintenance task, their frequency of completion and related procedure such as reliability programme necessary for safe operation.

The following reports are included in the maintenance procedures

1.Pilot reports

2. Miscellaneous

3. Statistical measurement

4. Workshop report

• PILOT REPORT

Pilot Reports, more usually known as "Pireps", are reports of occurrences and malfunctions entered in the aircraft Technical Log by the flight crew for each flight.

It is usual for the Technical Log entries to be routed to the Reliability Section (or Engineer/ Co-ordinator) at the end of each day.

• **MISCELLANEOUS REPORTS**

A variety of additional reports may be produced on a routine or non-routine basis. Such reports could range from formal minutes of reliability meetings to reports on the sample stripping of components.

STATISTICAL MEASUREMENT

To assist in the assessment of reliability, alert levels are established for the items which are to be controlled by the Programme. The most commonly used data and units of measurement (Pireps per 1,000 hours, Component Removals/ Failures per 1,000 hour, Delays/Cancellations per 100 departures, etc) have been mentioned . The choice of units of measurement will depend on the type of operation, the preference of the Operator .

• WORKSHOP REPORTS

A summary of the results of defect investigations, based on the workshop reports is normally produced by component type for assessment by the Reliability Committee.

INSPECTION

Inspection refers to any preventative maintenance that either the cabin crew or technicians perform at regular intervals. It includes annual examinations,100-hour, preflight checks, and progressive inspections to ensure that an aircraft is ready to fly and airworthy.

METHODS OF INSPECTIONS

- a) Visual inspection
- b) Operation tests
- c) Check of embedded pressure gauge
- d) Check by tapping with a test hammer
- e) Check by touching
- f) Check with crack scales

g) Check with dossiers of drawings and measurement with steel tapes, etc.

- h) Check with plummet,
- i) Non-destructive equipment, etc.
 - Interlocking function test

CLEANING /PAINTING, REPAIR

A firm that performs paint removal, surface preparation ,and coatings application in the industrial market.

Painting System: A term intended to include, with equal emphasis, not only the well accepted components of the system such as surface preparation and paint materials, but also the application, inspection, and safety function.

Coating System: A term which refers to the applied and cured multi layer film or the components of a system based on non-paint type coating.

Work: A term which refers to all works associated with the selection of the painting and coating systems, surface preparation, paint application, and inspection.

GENERAL REQUIREMENT

1.Every possible precaution shall be taken to ensure that the damaged surface(s) shall be thoroughly clean, dry, free from condensation, moisture, dust, oil grease, rust, dirt and other contaminants before the application of the touch-up/repair processes.

2. Any paint found to be incorrectly applied shall be removed and repainted to the appropriate painting/coating requirement.

THANK YOU