
MAINTENANCE CONTROL MANUAL (MCM)

1.0 PURPOSE

This Advisory Circular (AC) is issued to provide guidance information on preparing and submitting an Air Operators Maintenance Control Manual (MCM) to the Authority for approval in accordance with the Regulations.

2.0 REFERENCES

2.1 Regulation 62 of the Civil Aviation (Air Operator Certification and Administration) Regulations, 2018.

3.0 GUIDANCE AND PROCEDURES

3.1 General Information

3.1.1 The MCM is an air operator's manual for use and guidance by maintenance and operational personnel on maintenance issues. It states the organization management team and the organization commitment to comply with the regulatory requirement and to maintain the standards established during the approval certification process.

3.1.2 It explains in detail the operator's maintenance responsibilities, functions and obligations. It further explains the regulatory processes, methods, procedures and capabilities the operator employs to satisfy these regulatory requirements.

3.1.3 The MCM defines the operator's aircraft maintenance structure, quality system management, maintenance activity coordination, duties, responsibilities, qualification and training requirements of technical personnel.

Notes:

(i) *The MCM is normally presented with all other required manuals during the Formal Application phase of the Air Operator Certification.*

(ii) *The MCM provides the reference datum by which the Authority conducts the operator's approval inspection, the compliance surveillance and audit functions.*

(iii) *The general procedure, guidance and information that may be use to develop manuals in a format acceptable to the Authority are explained in the Development and Preparation of Manuals Advisory Circular No. CAA-AC-GEN002C.*

3.2 MCM Development and Preparation

3.2.1 An AOC holder's maintenance control manual shall include the following information which may be issued in one volume or separate parts depending on the size and capacity of the operators maintenance activities –

- a) a description of the administrative agreements between the AOC holder and an AMO;
- b) a description of the maintenance procedures and the procedures for completing and signing the certificate of release to service;
- c) a description of the procedures to ensure each aircraft an AOC holder operates is in an airworthy condition;
- d) a description of the procedures to ensure the operational emergency equipment for each flight is serviceable;
- e) the names and duties of the person or persons required to ensure that all maintenance is carried out in accordance with the maintenance control manual;
- f) a reference to the maintenance programme required by the Civil Aviation Regulations.
- g) a description of the methods for completion and retention of the operator's maintenance records required by the Civil Aviation Regulations.
- h) a description of the procedures for monitoring, assessing and reporting maintenance and operational experience;
- i) a description of the procedures for obtaining and assessing continued airworthiness information and implementing any resulting actions from the organisation responsible for the type design, and shall implement any other actions considered necessary by the State of Registry;
- j) a system of ensuring that any fault, malfunctions, defects and other occurrences that cause or might cause adverse effects on the continuing airworthiness of aircraft shall be transmitted to the organization responsible for the type design of that aircraft and in accordance with the Civil Aviation Regulations;
- k) a description of the procedures for implementing mandatory continuing airworthiness information as required by the Civil Aviation (Airworthiness) Regulations.
- l) a description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme in order to correct any deficiency in that programme as required by the Civil Aviation Regulations.
- m) a description of aircraft types and models to which the manual applies;

- n) a description of procedures for ensuring that un-serviceability affecting airworthiness are recorded and rectified;
- o) a description of the procedures for reporting to the State of Registry and the state of the operator of significant in-service occurrences; and
- p) a description of the operators safety management system as required by the Civil Aviation Regulations.
- q) a description of how the operator shall observe Human Factors principles. Some of the basic aspects requiring Human Factors optimization include:
 - a) written language, which involves not only correct vocabulary and grammar, but also the manner in which they are used;
 - b) typography, including the form of letters and printing and the layout, which has a significant impact on the comprehension of the written material;
 - c) the use of photographs, diagrams, charts or tables replacing long descriptive text to help comprehension and maintain interest. The use of colour in illustrations reduces the discrimination workload and has a motivational effect;
 - d) consideration of the working environment in which the document is going to be used, when print and page size are determined.
- r) Description of procedures to control the leasing of aircraft and related aeronautical products.

Note: An AOC holder shall not provide for use of its personnel in commercial air transport, a Maintenance Control Manual or its part that has not been reviewed and approved by the Authority.

3.3 The MCM Content Format

3.3.1 An AOC holder or applicant for an AOC shall submit and maintain a Maintenance Control Manual containing at least the information set out in Appendix 1 of this Advisory Circular.

3.3.2 The manual may be put together in one volume or separate subject user volumes provided all applicable subjects are covered as indicated in the Seventh Schedule.

3.4 MCM Approval

3.4.1 The MCM should be submitted to the Authority for approval (this is normally during the Formal Application phase of the AOC certification). It should be submitted with the Statement of Compliance document which identifies in what section of the MCM the applicable requirements of the regulations have been complied with.

3.4.2 If discrepancies are found the Authority will notify the air operator or applicant in writing about the observed discrepancies and recommendations, outlining what will be required to correct the discrepancies. If it becomes apparent that the amendment of the manuals is likely to delay commencement of the inspection as indicated in the Schedule of Events, the applicant is notified.

Note: Normally the certification process cannot proceed until the Authority is satisfied and has accepted the MCM.

3.4.3 When the Authority is satisfied that the MCM meets the requirements the List of Effective Pages will be stamped approved by the Authority and returned to the operator. A copy of the approved MCM will be retained by the Authority.

3.5 Amendments to the Approved MCM

3.5.1 The operator shall submit all proposed amendments to the MCM to the Authority for approval before implementation.

3.5.2 The Authority will review all amendments to the manuals. The Authority shall not limit this review to the amendments alone but also the impact of the changes on the overall manual system.

3.5.3 Continuous review of the manuals by the operator is necessary because both the aviation environment and the operations are constantly changing.



Kenya Civil Aviation Authority

Appendix 1

MAINTENANCE CONTROL MANUAL

1. Each AOC applicant and Operator shall submit and maintain a maintenance control manual containing at least the information set forth below.
2. The manual may be put together in any subject order and subjects combined so long as all applicable subjects are covered.

1.0 Administration and Control of the Maintenance Control Manual

1.1 Introduction

- (a) A statement that the manual complies with all applicable Authority regulations and requirements and with the terms and conditions of the applicable Air Operator Certificate;
- (b) A statement that the manual contains maintenance and operational instructions that are to be complied with by the relevant personnel in the performance of their duties;
- (c) A list and brief description of the various Maintenance Control Manual parts, their contents, applicability and use; and
- (d) Explanations and definitions of terms and words used in the manual.

1.2 System of Amendment and Revision

- (a) A Maintenance Control Manual shall describe who is responsible for the issuance and insertion of amendments and revisions;
- (b) A record of amendments and revisions with insertion dates and effective dates is required;
- (c) A statement that hand-written amendments and revisions are not permitted except in situations requiring immediate amendment or revision in the interest of safety;
- (d) A description of the system for the annotation of pages and their effective dates;
- (e) A list of effective pages and their effective dates;
- (f) Annotation of changes (on text pages and as practicable, on charts and diagrams);
- (g) A system for recording temporary revisions;
- (h) Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.; and
- (i) A statement of who is responsible for notifying the Authority of proposed changes and working with the Authority on changes requiring Authority approval.

2.0 General Organisation

2.1 Corporate commitment by the AOC

2.2 General information:

- a) Brief description of organization;
- b) a description of aircraft types and models to which the manual applies
- c) Relationship with other organizations;
- d) Fleet composition - Type of operation; and
- e) Line station locations.

2.3 Maintenance management personnel:

- a) Accountable Manager;
- b) Nominated Post holder;
- c) Names ,duties and responsibilities;
- d) Maintenance co-ordination;
- e) Organization chart(s); and
- f) Manpower resources and training policy.

2.4 Notification procedure to the Authority regarding changes to the maintenance arrangements locations, personnel, activities, or approval.

3.0 Maintenance Procedures

- 3.1 Aircraft logbook utilization and MEL application;
- 3.2 Aircraft maintenance programme - development and amendment;
- 3.3 Time and maintenance records, responsibilities, control, and retention;
- 3.4 Accomplishment and control of mandatory continued airworthiness information

(Airworthiness Directives)

- a). a description of procedures for assessing continuing airworthiness information and implementing any resulting actions;
- b). a description of the procedures for implementing action resulting from mandatory continuing airworthiness information
- 3.5 Analysis of the effectiveness of the maintenance programme;
 - a) description of establishing and maintaining a system of analysis and continued monitoring of the performance efficiency of the maintenance programme, in order to correct any deficiency in that programme

- 3.6 Non-mandatory modification embodiment policy;
- 3.7 Major modification standards;
- 3.8 Defect reports;

- a). a description of the procedures for complying with the service information reporting requirements of the Civil Aviation (Airworthiness) Regulations
- b). a description of procedures for ensuring that unserviceability affecting airworthiness are recorded and rectified
- c). a description of the procedures for advising the Authority and manufacturer of significant in-service occurrences
- d) a description of the procedures required by regulation 61 including, when applicable:
 - i) a description of the administrative arrangements between the operator and the approved maintenance organization;
 - ii) a description of the maintenance procedures and the procedures for completing and signing a maintenance release maintenance is based on a system other than that of an approved maintenance organization
- e).Deferred defect policy;
- 3.9 Engineering activity;
- 3.10 Reliability programmes;

- a) Airframe;
 - b) Propulsion; and
 - c) Components;
 - d) description of the procedures for monitoring, assessing and reporting maintenance
- and

operational experience;

3.11 Pre-flight inspection;

a) Preparation of aircraft for flight;

b) Sub-contracted Ground Handling functions;

c) Security of Cargo and Baggage loading;

d) Control of refuelling, Quantity/Quality; and

e) Control of snow, ice, dust and sand contamination to an approved aviation standard.

3.12 Aircraft weighing.

3.13 Flight test procedures.

3.14 Sample of documents, tags and forms used.