



AIRWORTHINESS

ADVISORY

CIRCULAR

CIVIL AVIATION AUTHORITY OF BOTSWANA

CAAB Document AAC-002

**DEVELOPMENT OF AMO
MAINTENANCE PROCEDURES
MANUAL (MPM)**

Intentionally left blank

TABLE OF CONTENTS

	Page number
1. Purpose	5
2. Status of this advisory circular	5
3. Effective Date	5
4. Applicability	5
5. Related Regulations	5
6. Related Publications	5
7. Definitions & Acronyms	5
8. Background	6
9. MPM Content and Format	6
10. Accountable Manager's Statement of Commitment	6
11. MPM Approval Process	7
12. Approval of MPM Amendments	8
13. Changes in Senior Personnel	8
14. Organisations Holding Foreign AMO Approvals	9
APPENDIX 1 - Maintenance Procedures Manual (MPM) Format	10

Intentionally left blank

1. PURPOSE

This Airworthiness Advisory Circular (AAC) provides information and guidance for compiling a Maintenance Procedures Manual (MPM) for approval by the Civil Aviation Authority of Botswana.

2. STATUS OF THIS ADVISORY CIRCULAR

This Airworthiness Advisory Circular is an original issuance.

3. EFFECTIVE DATE

This AAC becomes effective immediately.

4. APPLICABILITY

This guidance is applicable to all organisations that hold or seek CAAB approval to maintain Botswana registered aircraft.

5. RELATED REGULATIONS

Copies may be obtained from the Government Printer.

- Civil Aviation (Approved Maintenance Organisations) Regulations

6. RELATED PUBLICATIONS

For further information on this subject, operators are advised to review the following publications -

Copies may be obtained from Document Sales Unit, ICAO, 999 University Street, Montreal, Quebec, Canada H3C 5H7.

- ICAO Annex 6 – Operation of Aircraft
- ICAO Annex 8 - Airworthiness of Aircraft
- ICAO Doc 9760 - Airworthiness Manual

Note: Further information is available on CAAB Airworthiness Advisory Circular (AAC)-001: AMO Certification.

7. DEFINITIONS AND ACRONYMS

7.1 The following definitions are used in this circular

Accountable Manager. The manager who has corporate authority for ensuring that all maintenance activities required by the owner or operator of an aircraft are financed and carried out to the standard required by the Authority (CAAB).

- *Note: Other definitions used in this AAC may be found in the Civil Aviation (AMOs) Regulations*

7.2 The following acronyms are used in this circular

AAC Airworthiness Advisory Circular
AMO Approved Maintenance Organisation
AOC Air Operator's Certificate
CAAB Civil Aviation Authority of Botswana
CARs (Botswana) Civil Aviation Regulations

Advisory Circulars (ACs) are intended to provide advice and guidance to illustrate an acceptable means, but not necessarily the only means, of complying with the regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material. Where a regulation contains the words "prescribed by the Authority," the AC may be considered to prescribe a viable method of compliance, but status of that "prescription" is always "guidance" (never regulation).

ICAO International Civil Aviation Organization

MCM Maintenance Control Manual

MPM Maintenance Procedures Manual

8. BACKGROUND

- 8.1 Regulation 25 of the Civil Aviation (Approved Maintenance Organisations) Regulations, 2012 requires each Approved Maintenance Organisation (AMO) to provide a Maintenance Procedures Manual (MPM) for use by the AMO's personnel.
- 8.2 The purpose of the MPM is to set forth the procedures, means, and methods of the AMO. Compliance with the contents of the MPM will assure compliance with the Civil Aviation (Approved Maintenance Organisations) Regulations, which is a requirement for obtaining and retaining an AMO certificate.
- 8.3 The MPM should provide clear guidance to personnel on how the activities included in the airworthiness approval are managed and on how compliance with the appropriate continuing airworthiness requirements is achieved. It should also provide personnel with clear guidance on their personal responsibilities. AMO personnel should be familiar with those parts of the MPM that are relevant to the work they (personnel) perform.
- 8.4 The MPM forms one essential element of the maintenance organisation approval, so the manual and any subsequent amendments thereto should be approved by the CAAB prior to use.

9. MPM CONTENT AND FORMAT

- 9.1 The MPM should meet all the requirements specified in Regulation 25 of the Civil Aviation (Approved Maintenance Organisations) Regulations, 2012, and Schedule 2 of those Regulations.
- 9.2 The MPM should follow the format specified in Appendix 1 of this Advisory Circular. The manual may be put in any subject order as long as all applicable subjects are covered.
- 9.3 Apart from the need to ensure that the MPM addresses the requirements of paragraphs 9.1 and 9.2 above, the organisation should write the MPM to reflect the preferred procedures and not to please the Authority. CAAB Inspectors are required to establish that the procedures specified in the MPM are in compliance with the intent of the requirements, and then to establish if these are the same procedures intended for use within the facility.

10. ACCOUNTABLE MANAGER'S STATEMENT OF COMMITMENT

- 10.1 In addition to other requirements, the MPM is required by Civil Aviation (Approved Maintenance Organisation) Regulation 25.(5)(a) to have a statement signed by the AMO's Accountable Manager confirming that the MPM and any associated manuals define the maintenance organisation's compliance with this regulation and will be complied with at all times.
- 10.2 The Accountable Manager's statement embraces the intent of the following paragraph and in fact this statement may be used without amendment. Any modification to the statement should not alter the intent.

“This manual and any associated referenced manuals define the organisation and procedures upon which the CAAB approval is based. These procedures are approved by the undersigned and should be complied with, as applicable, when work/orders are being progressed under the terms of the approval.

It is accepted that these procedures do not override the necessity of complying with any new or amended regulation published by the CAAB from time to time where these new or amended regulations are in conflict with these procedures. It is understood that the CAAB will approve this organisation whilst the CAAB is satisfied that the procedures are being followed and work standards maintained. It is further understood that the CAAB reserves the right to suspend, limit or revoke the approval of the organisation if the CAAB has evidence that procedures are not followed or standards not upheld”.

Signed _____

Date _____

Accountable Manager and/or _____
(Position)

For and on behalf of _____
(Organisation)

- 10.3 The Accountable Manager’s statement should be signed before submission of the MPM to the CAAB.
- 10.4 Whenever the Accountable Manager changes, the AMO must ensure that the new Accountable Manager signs the paragraph 10.2 statement at the earliest opportunity. Failure to carry out this action could invalidate the approval.

11. MPM APPROVAL PROCESS

- 11.1 The MPM (and any associated attachments) should be submitted to the CAAB as part of the formal application, that is, during the “Formal Application Phase” of the AMO certification process (See *Airworthiness Advisory Circular (AAC)-001: AMO Certification*).
- 11.2 Upon receipt of the MPM, the CAAB will perform a cursory review of the manual to determine that it contains the type of information required by Regulation 25 and Schedule 2 of the Civil Aviation (Approved Maintenance Organisations) Regulations, 2012.
- 11.3 The applicant will be notified by letter stating whether the MPM is accepted or not. The Authority’s acceptance of an MPM does not constitute approval of the manual or individual attachments. The manual and any associated documents will be evaluated thoroughly later during the Document Evaluation Phase. If the MPM is not accepted, it will be returned with a written explanation of the reasons for its return.
- 11.4 After the MPM has been accepted, CAAB Inspectors will begin a thorough evaluation of the manual during the Document Evaluation Phase. If it is incomplete or deficient, or if non-compliance with the regulations or safe operating practices is detected, the manual will be returned for corrective action. If the MPM is satisfactory, it will be approved, as required by the Civil Aviation (Approved Maintenance Organisations) Regulations. Approval will be indicated by letter and by approval of the List of Effective Pages.

12. APPROVAL OF MPM AMENDMENTS

- 12.1 On occasions, an AMO will have reason to amend its MPM. Regulation 25.(2) of the Civil Aviation (Approved Maintenance Organisations) Regulations requires MPM amendments to be approved by the CAAB prior to use.
- 12.2 It is recommended that an MPM incorporate an approval status page which lists each amendment, and states against each amendment when it was approved by the CAAB and the document reference of that approval.
- 12.3 The AMO's Quality Manager should submit proposed amendments to the CAAB, unless the CAAB has agreed, by a procedure stated in the amendment section of the procedures manual, that some defined class of amendments may be incorporated without CAAB approval. The Quality Manager should monitor the amendment of the MPM, including the associated procedures manuals.
- 12.4 Approval of MPM amendments can take up to sixty (60) days or less depending on the nature of the amendment. The approval process is similar to the one discussed in paragraph 11 above.

13. CHANGES IN SENIOR PERSONNEL

- 13.1 The AMO will have reason on occasion to change one or more of the senior personnel all of whom have to be acceptable to the CAAB. Such personnel form "*Acceptance of Senior Management*" which is an essential element of the approval.
- 13.2 Pursuant to Regulation 11.(1) of the Civil Aviation (AMOs) Regulations, the AMO should notify the CAAB in writing of any proposed change at least fourteen (14) days before implementation of the change. The aim is to give the CAAB sufficient time to determine compliance with the Civil Aviation (AMO) Regulations and to amend the AMO certificate if necessary.
- 13.3 A change of Accountable Manager requires the AMO to submit in writing such fact to the CAAB. It is essential that the new Accountable Manager signs the statement of commitment to compliance with the maintenance organisation approval requirements as a matter of urgency. The only basis on which the CAAB may reject an Accountable Manager is where there is clear evidence that he/she previously held a senior position in any approved organisation and abused that position by not complying with the particular requirements.
- 13.4 A change of any of the senior personnel other than the accountable manager requires the AMO to submit, as a minimum, the following information in respect of that person:
 - Name (in full)
 - Position
 - Qualifications relevant to the position above
 - Work experience relevant to the position above
 - Signature and current date
- 13.5 The information required in paragraph 13.4 above should be sent under confidential cover to Director, Flight Safety, Civil Aviation Authority of Botswana, P. O. Box 250, Gaborone, Botswana. If satisfied with the qualifications and experience of the person in relation to the particular position the CAAB will indicate acceptance in writing to the AMO.
- 13.6 Changes in senior personnel will require an amendment to the MPM.

14. ORGANIZATIONS HOLDING FOREIGN AMO APPROVALS

When an organisation is approved against any other Regulations containing a requirement for an MPM, a supplement covering the differences will suffice to meet the requirements of the CARs except that the supplement should have an index showing where those parts missing from the supplement are covered.


.....
For/Civil Aviation Authority of Botswana



End of Advisory Circular

APPENDIX 1

Maintenance Procedures Manual (MPM) Format

Part 1 - Management

- 1.1 Corporate commitment by the Accountable Manager
- 1.2 Management personnel
- 1.3 Duties and responsibilities of the management personnel
- 1.4 Management Organisation Chart
- 1.5 List of certifying staff. (Note: A separate document may be referenced)
- 1.6 Manpower resources
- 1.7 General description of the facilities at each address intended to be approved
- 1.8 Organisations intended scope of work
- 1.9 Notification procedure to the Authority regarding changes to the organisation's activities/approval/location/personnel
- 1.10 Manual amendment procedures

Part 2 - Maintenance Procedures

- 2.1 Supplier evaluation procedure
- 2.2 Acceptance/inspection of aircraft components and material from outside contractors
- 2.3 Storage, tagging and release of aircraft components and material to aircraft maintenance
- 2.4 Acceptance of tools and equipment
- 2.5 Calibration of tools and equipment
- 2.6 Use of tooling and equipment by staff (including alternate tools)
- 2.7 Cleanliness standards of maintenance facilities
- 2.8 Maintenance instructions and relationship to aircraft/aircraft component manufacturers' instructions including updating and availability to staff
- 2.9 Repair procedure
- 2.10 Procedures for compliance with an air operator's aircraft maintenance program
- 2.11 Airworthiness Directives procedure
- 2.12 Optional modification procedure
- 2.13 Maintenance documentation in use and completion of same
- 2.14 Technical record control
- 2.15 Procedures for handling and rectification of defects arising during base maintenance

- 2.16 Release to service procedure
- 2.17 Records for the Operator
- 2.18 Reporting of defects to the Authority, Operator or Manufacturer
- 2.19 Return of defective aircraft components to store
- 2.20 Defective components shipped to outside contractors
- 2.21 Control of computer maintenance record systems
- 2.22 Control of man-hour planning versus scheduled maintenance work
- 2.23 Control of critical tasks
- 2.24 Reference to specific maintenance procedures such as:
 - Engine running procedures
 - Aircraft pressure run procedures
 - Aircraft towing procedures
 - Aircraft taxiing procedures
- 2.25 Procedures to detect and rectify maintenance errors
- 2.26 Shift/task handover procedures
- 2.27 Procedures for notification of maintenance data inaccuracies and ambiguities to the type certificate holder
- 2.28 Production planning procedures

Part L2 - Additional Line Maintenance Procedures (when applicable)

- L2.1 Line maintenance control of aircraft components, tools, equipment, etc.
- L2.2 Line maintenance procedures related to servicing/fuelling/de-icing, etc.
- L2.3 Line maintenance control of defects and repetitive defects
- L2.4 Line procedure for completion of technical log
- L2.5 Line procedure for pooled parts and loan parts
- L2.6 Line procedure for return of defective parts removed from aircraft
- L2.7 Line procedure control of critical tasks

Part 3 - Quality System Procedures

- 3.1 Quality audit of organisation procedures
- 3.2 Quality audit of aircraft
- 3.3 Quality audit findings remedial action procedure
- 3.4 Certifying staff qualification and training procedures
- 3.5 Certifying staff records

- 3.6 Quality audit personnel
- 3.7 Qualifying inspectors
- 3.8 Qualifying mechanics
- 3.9 Exemption process control.
- 3.10 Concession control for deviation from organisations' procedures
- 3.11 Qualification procedure for specialised activities such as non-destructive testing, welding, etc.
- 3.12 Control of manufacturers' working teams based at the premises of the organization, engaged in tasks which interface with activities included in the approval
- 3.13 Human factors training procedure
- 3.14 Competence assessment of personnel.

Part 4 - Documentation

- 4.1 Contracted air operators
- 4.2 Air operator procedures and paperwork
- 4.3 Air operator record completion

Part 5 -Examples of documents; lists

- 5.1 Sample of standard documents used by the AMO which are associated with activities undertaken under the terms and conditions of the approval, such as technical record control or rectification of defects.
- 5.2 List of subcontractors
- 5.3 List of line maintenance locations
- 5.4 List of contracted organizations

Intentionally left blank