



# TECHNICAL GUIDANCE MATERIAL

## for

### Review and Approval of

### Operator's Maintenance Control Manual

**SUBJECT:** REVIEW AND APPROVAL OF OPERATOR'S MAINTENANCE CONTROL MANUAL

**EFFECTIVE DATE:** 30 June 2021

#### APPLICABILITY

This Guidance Material is applicable to SACAA approved AOC Holders.

#### PURPOSE

This Guidance Material is aimed to provide guidance for the development and seeking approval for the operator's Maintenance Control Manual (MCM) for the use and guidance of the maintenance personnel concerned.

#### REQUIREMENTS

Part 93; 121; 127 and 135 of the SACAR 2011, as amended.

#### 1. REFERENCE

- i. AIC
- ii. Annex 6 Part I and Part III
- iii. CAR Part 121.09.5
- iv. CAR Part 127.09.5
- v. CAR Part 135.09.5
- vi. CAR Part 43.02.3(f)
- vii. CAR Part 93.09.5
- viii. ICAO Doc 9760
- ix. SACATS 43.02.3.1
- x. Statement of Compliance CA 43-19

#### 2. TERMS AND ABBREVIATIONS:

TERMS	DESCRIPTION
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NONE

ABBREVIATION	DESCRIPTION
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AMO Aircraft Maintenance Organisation

AMP	Aircraft Maintenance Programme
AWI	Airworthiness Inspector
DCA	Director Civil Aviation Authority
EDTO	Extended Diversion Time Operations
LEP	List of Effective Pages
LVO	Low Visibility Operations
MCM	Maintenance Control Manual
MEL	Minimum Equipment List
OEM	Original Equipment M
OM	Operations Manual
OpsSpecs	Operations Specifications
PRA	Person Responsible Aircraft
SACAA	South African Civil Aviation Authority
SACARs	South African Civil Aviation Regulations
SACATs	South African Civil Aviation Technical Standards
TGM	Technical Guidance Material

### 3. GENERAL

#### 3.1 Contents of an MCM

3.1.1 When preparing an MCM the operator should ensure that the policies and procedures contained in the manual attain the following objectives:

- a. The proposed procedures are not contrary to the SACARs and other AOC holder approved operational manuals.
- b. do not contravene the terms and conditions in the operator's AOC and associated operations specifications.
- c. provide clear, complete and detailed operating instructions, policies and procedures so that personnel concerned are fully informed of what is required of them. Procedures shall be effective, represent sound safety philosophy and be capable of being accomplished;
- d. make provisions for revision to ensure that the information contained therein is kept up to date;
- e. present the necessary guidance and instructions to personnel in a suitable and convenient easy to read, easy to amend format; and
- f. The MCM may be complemented by other manuals, covering specific subjects. Examples of such manuals are the aircraft maintenance programme, reliability manual, quality manual, weight and balance procedures manual, EDTO manual, MEL and others. The size, as well as the number of volumes of the MCM will depend upon the size and complexity of the proposed operations. The overall manual system may be organized in any manner which adequately provides guidance concerning all important aspects of maintenance operations and continuing airworthiness management.

3.1.2 In all cases, the following areas must be considered:

##### 3.1.2.1 Organization and readability.

The manual shall be organized so that the information is easy to locate. Tables of contents shall be detailed enough so that specific subject areas may be easily and expeditiously located. The typography including the size and shape of the letters and pages, the presentation and the quality of printing shall facilitate reading and understanding, illustrations, and graphics shall be clear and readable. The written language shall be clear, concise and grammatically correct.

### 3.1.2.2 **Validity and accuracy.**

The information contained in the manual shall be valid and accurately reflect data provided by SACARs, Type Certificate Holder and air operator's company policies and procedures.

### 3.1.2.3 **Consistency.**

Information presented in the various sections or volumes of the manual shall be consistent with that presented in other sections;

### 3.1.2.4 **Currency and conformity.**

Information contained in the manual shall reflect current operator's procedures and policies, equipment and be in compliance with the current applicable requirements. The manual(s) shall be easy to update and contain a list of effective pages;

## 3.2 **Purpose of an MCM**

- a. Part 93; 121; 127 and 135 of the SACAR 2011, as amended requires that an Air Operator Certificate (AOC) holder must prepare and maintain a maintenance control manual for the use and guidance of the operational and maintenance personnel concerned in the performance of their duties.
- b. The MCM is normally presented with all other required manuals during the Formal Application phase of an AOC certification. It must satisfy the regulatory requirements of CAR Part 93; 121; 127 and 135 subpart 9 and Part 43.02.3(f) read with SACATS 43.02.3.1 of the SACARs of 2011, as amended.
- c. The MCM is an air operator's manual for use and guidance of maintenance and operational personnel on maintenance issues. 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 and to maintain the standards established during the approval certification process.
- d. The air operator must prepare the MCM to be used whether maintenance is carried out by the operator's (in-house) AMO or it is contracted out to another AMO. It should contain all instructions, information and procedures necessary to control the maintenance (continuing airworthiness) of all aircraft approved on the AOC OpsSpecs.
- e. The MCM defines the operator's continuing airworthiness management structure, quality and safety management system, maintenance activity coordination, duties and responsibilities of management personnel, qualification and training requirements of technical personnel and continuing airworthiness management procedures.
- f. The SACAA requires the air operators, when developing an MCM to prepare a detailed statement of compliance with all regulatory requirements applicable to the operation, as described in the Maintenance Control System Statement of Compliance. This will assist the operator to ensure that all applicable regulatory provisions are properly covered.
- g. In order to obtain SACAA approval, the air operator must ensure that the MCM follows the guidance and structure of this TGM and the manual should include, as a minimum, the contents specified in the governing regulation, as applicable to the operation.

## 4. MCM DEVELOPMENT AND PREPARATION

### 4.1 Regulatory Requirements

SACAR 43.02.3 (f) read with SACATS 43.02.3 .1(1) states that 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 air operator's maintenance activities –

- a. A description of the procedures required to ensure that –
  - i. each aircraft, covered by the MCM, is maintained in an airworthy condition;
  - ii. the operational and emergency equipment, necessary for an intended flight is serviceable; and
  - iii. the certificate of airworthiness and the certificate of release to service remains valid for each aircraft covered by the MCM;
- b. a description of the administrative agreements between the operator and an AMO;
- c. a description of the maintenance procedures and the procedures for completion and signing of maintenance that is based on a system other than that of an AMO;
- d. names and duties of the person or persons who are required by the MCM to ensure that all maintenance is carried out in accordance with the MCM;
- e. a reference to the approved maintenance programme for each aircraft type, containing the information as prescribed in subsection (2);
- f. a description of the methods used for the completion and retention of the maintenance records;
- g. a description of the procedure for monitoring, assessing and reporting maintenance and operational experience to the DCA;
- h. a description of the procedures for complying with the service information reporting requirements to the organisation responsible for the type design of the aircraft and to the DCA;
- i. a description of the procedures for implementing action resulting from mandatory continuing airworthiness information and procedures for assessing continuing airworthiness information, issued by the organisation responsible for the type design of the aircraft covered by the MCM;
- j. 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;
- k. a description of procedures for ensuring that unserviceable items affecting airworthiness are recorded in the flight folio and rectified or deferred in the flight folio in accordance with the MEL;
- l. a description of procedures for controlling deferred defects, clearing them on return to base, or extending them for a time period acceptable to the DCA;
- m. a description of extending deferred defects over and above the time period acceptable to the DCA, and the number of times an extension may be applied for, taking into account the category of severity in each case;
- n. a description of procedures for controlling recurring defects, the reporting system to be established, and system to effect corrective action;
- o. a description of procedures for controlling the removal and use of parts from other aircraft, the control and certification of such action and the controlling of TBO records when this occurs;
- p. a description of the procedure for advising the DCA of significant in-service occurrences;
- q. a description of aircraft types and models to which the manual applies;
- r. a description of and procedures for completing and signing a maintenance release for aircraft and parts thereof that have undergone maintenance;
- s. a description of the procedures to ensure the aircraft is maintained in accordance with the maintenance programme;

- t. a description of the training programme for the maintenance personnel employed by the air service operator applicable to their assigned duties and responsibilities;
- u. a description of the air service operator's SMS; Note. – Where an operator's SMS is already addressed in some other document, an appropriate reference to such document together with its relevant interfaces with the MCM can be described instead.
- v. a description of the procedure to ensure that modifications and repairs comply with the airworthiness requirements prescribed under this Part: and;
- w. a description of the procedure used for the MCM revision and control;

## 4.2 MCM Content and Format Requirements

Apart from the item listed above in 4.1, the items below specify the minimum information that must be contained in the manual. The format of each air operator's manual may be different. The format does not really matter; but it should be in a logical order with the user in mind.

### 4.2.1 Table of Contents

The table of contents is used in the manual to enhance data access and information retrieval by allowing a quick scan on the entire manual when looking for a key item. The table of content contains a list of the manual topics identified by the number and manual page number.

### 4.2.2 General Information

- a. The MCM shall contain the legal name of the air operator and, where that name is not the name under which the air operator does business, its trade name. An air operator's legal name is the title it is registered under to conduct business in South Africa and shall be according to the AOC holder Air Service Licence.
- b. The description of the air operator must include the size, location of facilities, aircraft operated "fleet composition" and what type of service is offered to the public. This is helpful to determine if the policies contained in the manual are appropriate with the size and complexity of the operations.
- c. This information should include street address and/or mailing address, phone and fax numbers, and an email address

### 4.2.3 List of Effective Pages

The air operator's MCM shall contain a means of identifying each page of the manual, which tracks all the manual pages effectivity. This shall be in the form of a List of Effective Pages "LEP". LEPs are used to ensure that every manual contains current information in terms of revision status of each page and effective date.

### 4.2.4 Approval Page

- a. The MCM shall include the air operator's corporate commitment, where the AOC holder pledging to a adhere to the South African Civil Aviation Regulation and the contents of the MCM.
- b. The manual should have a provision for the approval for both the operator's nominated post holder "PRA" and the SACAA.

### 4.2.5 Distribution List

- a. A copy of the MCM shall be made available to each person who manages maintenance activities, performs or certifies a function that is dealt with in the manual. The PRA is responsible for distribution of this manual and will ensure that all holders have an updated copy. Each copy shall be numbered for identification and issued according to a specific distribution list, and each holder made responsible for its prompt and accurate update
- b. The air operator shall have an effective system for distributing and updating the manual. The distribution list shall contain all organisations and personnel requiring the information therein for proper performance of their duties.
- c. The manual shall contain the air operator description of the system used to distribute the manual, including the name or title of each person who holds a copy of the manual. The PRA and the SACAA are the minimum number of the MCM holders.

#### 4.2.6 Amendment Control

- a. The air operator's MCM shall identify individual/s responsible for amending the manual and submission to the SACAA for approval.
- b. The manual shall contain a description of the MCM amendment control procedure and it should indicate how and when the amendments will be inserted in each copy of the manual after receiving approval.
- c. All amendments made on the MCM shall be submitted to the DCA for approval, unless prior approval has been obtained by the operator to incorporate changes directly.
- d. The air operator who can incorporate changes on the MCM must have a prior approved procedure to effect these amendments. The amendments shall be controlled through a temporary revision, the temporary revision procedure should have a timeline on when the amendment will be submitted to the SACAA for approval. *(this privilege will usually only be practical for a large aircraft operator)*.
- e. The temporary revision in paragraph (f)(iv) above shall not be applicable to AOC post holder changes, base of operation and aircraft addition and/or removal of aircraft, as these are regulatory requirements and require an application to the SACAA *(refer to CAR Part 93, 121, 127 and 135 subpart 6)*.
- f. Continuous review of the MCM by the air operator is necessary because both the aviation environment and the operations are constantly changing.

*Note: The MCM shall be evaluated on an annual basis to ensure compliance with the requirements.*

#### 4.2.7 Maintenance Management Personnel/Assignment of function

- a. The paragraph should detail the names and persons employed to ensure that all maintenance is carried out in accordance with the MCM.
- b. The duties and responsibilities of the approved PRA, the procedure should also describe delegation of duties when the approved post holder is not readily available to perform his or her duties. This procedure shall not contradict regulatory requirements and approved OM procedures.
- c. Maintenance control structure, the procedure/paragraph should identify employees or occupants of positions who have been delegated/appointed as authorized persons for the purpose of exercising certain duties under the PRA responsibilities, and the procedures of how they exercise the delegated duties.
- d. The paragraph should also list the duties, responsibilities and authorities of all persons involved in the control and performance of all activities related to the maintenance of the aircraft and, if necessary, by means of an organisational chart indicating the interrelationship of the responsibilities.
- e. There are three information requirements;
  - i. the name and title of the person to whom the functions have been assigned;
  - ii. a description of the functions that have been assigned to each person; and
  - iii. to ensure comprehension, a chart depicting the distribution of the functions.

**4.2.8 The MCM shall contain at least a description of the kinds of personnel records to be retained by the air operator.**

**4.2.8.1 Performance of Maintenance**

a. Responsibilities

- i. The MCM shall include procedures and standards for maintenance, inspection and servicing of all the aircraft operated by the AOC holder. This shall include personnel or organizations approved to perform maintenance and/or inspections of aircraft.
- ii. The MCM shall contain a description of the air operator's maintenance procedures and a procedure for completing and signing the maintenance release to service. The procedure should detail the following;
- iii. the procedure based on a system other than that of a contracted AMO;
- iv. who is responsible for the completion and signing the maintenance release to service.
- v. the qualification requirements for the person/organisation responsible for the completion and signing the maintenance release to service.
  
- vi. The air operator's MCM shall contain procedures to ensure that regulatory information and technical data appropriate to the work performed are used in respect to aircraft maintenance performance or servicing.
- vii. This procedure should explain the system that ensures any person who performs maintenance work and/or servicing has the latest applicable technical manuals, airworthiness directives, regulatory requirements or other related information. This system should be easily auditable and should address how technical and regulatory information is controlled for any work that is performed away from base.

**4.2.8.2 Maintenance Planning and Control**

- a. The recording of flight hours and cycles is essential for the planning of maintenance tasks. The MCM should have a procedure explaining how the air operator and contracted AMO have access to the current flight hours and cycle and how it is information processed.
- b. The MCM should contain a detailed description of the procedure used to ensure that any maintenance tasks required by the aircraft maintenance programme, airworthiness directive, or any task required for the rectification of a defect is completed within specific time.
- c. The complexity of the system depends on the size of the air operator, the aircraft types and the number of aircraft operated. The system is the process used by the PRA to track the status of aircraft to forecast maintenance. From this information arrangements can be made for the required maintenance to be scheduled.

**4.2.8.3 Maintenance/Technical Records**

- a. aircraft continuing airworthiness record system utilisation.
- b. The maintenance control manual (MCM) of an air operator shall contain the information detailing the aircraft technical record system and/or continuing airworthiness record system

used by the air operator. The method used to record the maintenance, shall meet the requirements of CAR Part 93; 121; 127 and 135 subpart 9 and Part 43 subpart 3.

- c. The maintenance records shall include/but not limited to, the technical log; logbooks for the airframe, engines, propellers; flight folios; computerized aircraft maintenance tracking system and an empty weight and balance report. Whatever system is chosen, the following key points should be considered:
  - i. Keep the system as simple and direct as possible
  - ii. Eliminate duplication of information on multiple forms
  - iii. The system should be easily auditable
- d. This procedure should provide instructions for using the aircraft technical record and/or continuing airworthiness record system. It should emphasize on the respective responsibilities of the maintenance personnel and operating crew. Samples of the technical log and/or continuing airworthiness record system may be included as an Appendix in order to provide enough detailed instructions.

#### 4.2.8.4 Maintenance records, responsibilities, retention, access

- a. The air operators should also have a procedure for retention of technical records, detailing how the maintenance records are retained and who is responsible for the retention. This can be provided by a table or series of tables that includes the following:
  - i. Name of document,
  - ii. Retention period,
  - iii. Responsible person for retention,
  - iv. Place of retention
- b. The procedure should set out the means provided to protect and preserve the records from fire, floods, etc. as well as the specific procedures in place to guarantee that the records will not be altered during the retention period (especially for the computer record).
- c. The procedure should set out the procedure for the transfer of continuing airworthiness records, in case of purchase/lease-in, sale/lease-out and transfer of the aircraft to another organisation. In particular, it should specify which records have to be transferred and who is responsible for the coordination (if necessary) of the transfer.

#### 4.2.8.5 Aircraft Maintenance Programme

##### General

- a. The air operator's MCM shall contain an introductory paragraph describing the purpose of an aircraft maintenance programme, and its importance for the provision of maintenance planning instructions necessary for the safe operation of the aircraft.
- b. It should contain the identification of any aircraft maintenance programme approved by the SACAA in respect of any of the air operator's aircraft.
- c. The Aircraft Maintenance Programme is a stand-alone document, it is approved separately from this manual, by the SACAA. The air operator's AMP should meet the requirements of CAR Part 93; 121; 127 and 135 subpart 9 and Part 43.02.8.



#### 4.2.8.6 Development

- a. The air operator's MCM should explain who is responsible for the development of an aircraft maintenance programme and submission to the SACAA.
- b. It should contain the sources documents (MRB, MPD, Maintenance Manual, etc.) used for the development of an aircraft maintenance programme.
- c. The MCM should contain a procedure for the continuous monitoring of the operator's AMP include a review of all manufacturers' publications the programme is derived on. This continuous monitoring should address the following;
  - i. the procedure to amend the AMP, detailing who shall be responsible for the amendments.
  - ii. the procedure for establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the AMP in order to correct any deficiency in the programme.
  - iii. the procedure indicating how often will the AMP be evaluated and by whom.
- d. Where applicable, the air operator's MCM should contain a brief description of the reliability program. The description should outline the following:
  - i. the purpose of the reliability
  - ii. the applicable aircraft fleet covered by the reliability program
  - iii. the organisation which runs the reliability program (the air operator or contracted AMO)
  - iv. if contracted, the parts of the reliability program that are contracted out
  - v. the program structure, duties and responsibilities
  - vi. reliability personnel training/technical competency requirements
  - vii. reliability reporting methods and frequency of reporting
  - viii. reliability meetings frequency

**Note:** *The reliability program forms part of the AMP or it can be a separate manual and is approved with the AMP or separately, by the SACAA*

#### 4.2.8.7 Defect Control and Rectification

- a. The SACAR requires that all installed equipment must be functioning correctly prior to flight therefore, the air operator's MCM must include procedures to ensure that aircraft are not operated with unserviceable equipment unless the defect can be deferred.
- b. The air operator's MCM shall contain a description of the defect rectification and control procedures including details of:
  - i. the procedures for scheduling the rectification of defects whose repair has been deferred in accordance with an approved MEL.
  - ii. the methods used to detect and report recurring defects.
- c. The MCM must contain procedures to manage defects and to ensure that the PRA knows the status of the aircraft, so the necessary rectifications can be arranged within required time limits.

#### 4.2.8.8 MEL Application

- a. The MCM should have a description of a MEL and its uses.
- b. A procedure detailing how the maintenance personnel identify a MEL limitation to the crew with a reference to the technical log procedures.
- c. A procedure for ensuring that unserviceable items affecting airworthiness are recorded in the flight folio and rectified or deferred in the flight folio in accordance with the MEL
- d. It should define the MEL the repair interval categories for rectification of deferred defect
- e. A procedure for the management of the MEL time limits to ensure that the defect will be corrected before the limit specified in the MEL is exceeded.
- f. A description of the specific duties and responsibilities for controlling MEL extensions when the SACAA grants the operator to overrun MEL time limitation under specified conditions.
- g. The air operator's MCM should contain initial and recurrent MEL training programme for maintenance personnel.

**Note:** Refer to CA AOC-008 Approval of MEL CDL TGM where the above is addressed in detail.

#### 4.2.8.9 Recurring Defects

- a. The air operator's MCM must have a procedure for identifying recurring defects to avoid ineffective methods of repair and to ensure the defect will not reoccur.
- b. The MCM must define a recurring defect, this will allow the air operator to identify a recurring defect.
- c. It must clearly define who is responsible to track the recurring defects.
- d. It must contain a procedure for handling an identified recurring defect and define the PRA responsibilities once a defect has been identified as a recurring defect.
- e. The MCM must contain procedure to manage defects and to ensure that the PRA knows the status of the aircraft, so the necessary rectifications can be arranged within required time limits.
- f. It must describe the action taken by the PRA

#### 4.2.8.10 Removal and Use of Parts from Other Aircraft (Parts Robbing)

- a. The MCM should contain a procedure on how the air operator handles the removal of parts from one aircraft to service another aircraft, the procedure should address the following;
  - i. a procedure that describes eligibility requirements for donor and recipient aircraft
  - ii. the air operator's MCM should have a procedure to ensure that the part removed from the donor aircraft, is removed in accordance with approved maintenance data by an appropriately qualified person, and using the tools specified
  - iii. a process/procedure of ensuring that donor aircraft last flight operation with the part fitted revealed no faults on that part and related system

- iv. a process/procedure of ensuring that the donor aircraft service life limited parts shall be determined and their service life remaining should be transferred to the recipient aircraft records
- v. a procedure that details the requirements of all maintenance records and certificates relating to an aircraft parts robbery.
- vi. a process/procedure detailing tests if any the robbed part will be subjected to ensure serviceability prior to use

**Note:** Further refer to TGM for Authenticity and Serviceability of Aircraft Parts

#### 4.2.8.11 Service Difficulty Reporting

- a. The air operator's MCM shall have a procedure used to report service difficulties to the DCA
- b. It is important that the system described in the MCM is clear and reflects that each reportable incident be submitted as a separate report.
- c. The description of the system should include who submits the report, when and in what format

#### 4.2.8.12 Contracted Maintenance

##### Maintenance contractor selection procedure

- a. The air operator's MCM should contain a criterion use for the selection of a contracted AMO.
- b. Selection should not be limited to the verification that the contracted AMO is appropriately approved for the type of maintenance required, but also that the contractor has the industrial capacity to undertake the required maintenance. This selection procedure should preferably include a contract review process in order to ensure that:
  - i. the contract is comprehensive, and it does not contradict the procedures contained in the MCM
  - ii. everyone involved in the contract (both at the AOC holder and the contracted AMO) agrees with the terms of the contract and fully understand their responsibility.
  - iii. that functional responsibilities of all parties are clearly identified.
  - iv. acknowledgment of the operator's responsibility to ensure contracted maintenance is adequately controlled and managed.
  - v. procedure for sub-contracting maintenance that main contracted AMO is not rated for
- c. Where applicable, processes contained in maintenance contracts must align with the processes outlined in the MCM or other operational documents as applicable.

**Note:** Refer to TGM for Generic Process for inspection of contracted/sub contracted maintenance

#### 4.2.8.13 Maintenance arrangements

- a. The air operator's MCM shall contain at least details of the procedures governing maintenance arrangements entered in to and a list of all such arrangements.
- b. This shall include the procedure used to communicate to an approved maintenance organization the maintenance requirements with regard to planned and unforeseen maintenance activities as well as those mandated by airworthiness directives.

#### 4.2.8.14 Quality audits

- a. The MCM should set out the procedure for performing a quality audit. It should set out the differences between an airworthiness review and quality audit. This procedure may include:
  - i. compliance with approved procedures;
  - ii. contracted maintenance is carried out in accordance with the contract;
  - iii. continued compliance with Part 43.

#### 4.2.8.15 Aircraft weighing

- a. The MCM shall detail the person responsible for the weight and balance management
- b. The procedure should state in which occasion an aircraft has to be weighed (for instance after a major modification because of weight and balance operational requirements, etc.) who performs it, according to which procedure, who calculates the new weight and balance and how the result is processed into the organization and the submission of the report to the SACAA.
- c. The equipment and airworthiness data use for aircraft weighing

#### 4.2.8.16 Technical Dispatch

- a. The air operator's MCM shall contain a description of the technical dispatch procedures, including procedures for ferry-flight authorizations, all weather operation, RVSM, EDTO or any other special operation.

**Note:** For more information regarding the above refer to the relevant SACARs, SACATs and TGM are available.

- b. In relation to all weather operation, the following procedures should be contained in the MCM
  - i. list of equipment/systems required for Low Visibility Operations
  - ii. procedures for the controls of critical equipment used for LVO
  - iii. personnel training and qualification requirements
  - iv. Operational status of system
    - procedures for downgrading from Category III to Category II or I.
    - procedure for identifying an aircraft downgrade status prior to dispatch (provisions should be made to inform the flight crew of Category III to Category II status before dispatch)
    - procedures for "upgrading" after corrective actions have been accomplished, and details of who can upgrade the system (authorization requirements)
    - the reliability monitoring of the autoland system (the details should be covered on reliability program)
- c. The purpose of the technical dispatch procedures is to ensure that only those aircraft that conform to applicable airworthiness and operational requirements are dispatched. This system also forms the basis upon which the pilot will determine aircraft serviceability in respect of airworthiness directives, maintenance, weight and balance control or operational requirements.

- d. The system should be designed to prevent the dispatch of an aircraft unless all equipment necessary for the specific flight is serviceable, maintenance performed on the aircraft was complete and properly certified and identifies any test flight requirements.

#### 4.2.8.17 Modifications

- a. The air operator's MCM should specify how the non-mandatory modification information are processed through the organisation, who is responsible for their assessment against the operator's own need and operational experience, what are the main criteria for decision and who takes the decision of implementing (or not) a non-mandatory modification
- b. The MCM should set out a procedure for the assessment of the approval status of any major modification before embodiment. This will include the assessment of the SACAA or design organisation approval. It should also identify the type of approval required, and the procedure to follow to have a modification approved by the SACAA.

#### 4.2.8.18 Engineering activity

- a. Where applicable, the air operator's MCM should define the scope of the organisation's engineering activity in terms of approval of modification and repairs. It should set out a procedure for developing and submitting a modification/repair design for approval to the SACAA and include reference to the supporting documentation and forms used. It should identify the person in charge of accepting the design before submission to the SACAA.
- b. Where the organisation has a DOA (Design organization approval) capability, it should be indicated on the MCM and the related manuals should be referred to.)

## 5. MCM APPROVAL PROCESS

### 5.1 MCM Initial Approval

5.1.1 During the initial air operator's certification process operator is required to submit the MCM to the SACAA for approval.

- a. The application should contain:
  - i. the SACAA MCM Application Form
  - ii. two originals of the MCM (may be presented in one or more volumes);
  - iii. a Statement of Compliance with the applicable regulations (Part 93, 121, 127 or 135, as applicable to the operation) prepared in accordance with CA 43-19. Information in the manual should adequately describe the means of compliance with the particular regulatory requirement;
- b. Upon receipt, the SACAA will perform a cursory review of the application and informs the applicant, in writing, of its acceptability. Incomplete applications will be returned with an explanation letter detailing the reasons for rejection.
- c. A detailed review of the MCM is performed by comparison of its contents with the applicable regulatory requirements, considering all aspects of the proposed operations. Where the manual does not cover the

required information or certain procedures are considered unsatisfactory, the operator is notified of any deficiencies for correction;

- d. If discrepancies are found:
  - i. The air operator is notified in writing listing the specific discrepancies found;
  - ii. The SACAA approval/non-approval of the MCM should be made known to the operator within 30 days of receipt of the application.
  - iii. Re-submissions are evaluated to determine if they comply with regulatory guidance before final approval;
- e. Upon being satisfied that all deficiencies identified during the manual review process and during the demonstration and inspection phase have been corrected and ascertaining that the manual contents properly addresses all applicable regulatory requirements and correctly reflects the operator's organisation and operation, in conformity with the approvals and authorizations sought in the operator's operations specifications, the SACAA will issues the approval of the MCM.
- f. When satisfied that the MCM meets all requirements, the document shall be approved. The SACAA MCM approval will be reflected by the stamping and signature on the List of Effective Pages of the two original manuals and on the approval portion of the manual. Also, the approval of the MCM shall be notified by the SACAA approval certificate.
- g. The SACAA keeps one original of the approved MCM and returns the other original to the applicant.




## 5.2 Amendments and Revision of the MCM

The operator is required by regulation to keep the information in the MCM up to date. The MCM should be amended whenever a change occurs in the requirements or in the operations. All amendments and revisions to the MCM, except for temporary revisions shall be approved by the DCA prior to implementation.

### 5.3 The application for an amendment or revision shall be accompanied by:

- a. the SACAA MCM application form.
- b. a cover letter explaining the proposed changes;
- c. two originals of the proposed amendment or revision, including the amended pages with highlights of the proposed changes, as per the revision procedures, and updated List of Effective Pages and Table of Contents.
- d. if affected, an updated version of the existing Statement of Compliance with the applicable regulations (Part 93, 121, 127 or 135, as applicable to the operation) prepared in accordance with the Statement of Compliance.
- e. The approval process follows, with the necessary, adaptations the steps described above for the initial approval.
- f. Amendments to the approved MCM are subjected to the same approval process. The amendment approval evaluation however, includes the impact of the amendment to the overall operator's manual system.

**DEVELOPED BY:**

	<b>SIPHAMANDLA MHLANGA</b>	<b>30 JUNE 2021</b>
<b>SIGNATURE OF M: FOD</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>
<b>REVIEWED &amp; VALIDATED BY:</b>		
	<b>ERIC MATABA</b>	<b>30 JUNE 2021</b>
<b>SIGNATURE OF SM: FOD</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>
<b>APPROVED BY:</b>		
	<b>SIMON SEGWABE</b>	<b>30 JUNE 2021</b>
<b>SIGNATURE OF E: ASO</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>

**END**