



Instituto Nacional de Aviação Civil

CIVIL AVIATION AUTHORITY

SUBJECT: MAINTENANCE PROCEDURES MANUAL (MPM) DEVELOPMENT

DATE: 01/12/2012

1. PURPOSE

This Technical Circular (TC) is issued to provide guidance information on preparing, and approval of a maintenance organization Maintenance Procedures Manual in accordance with the Civil Aviation Regulations.

2. BACKGROUND

- A. STP-CAR Part 6 of the Civil Aviation (Approved Maintenance Organisation) specifies that a Maintenance Organisation shall provide a Maintenance Procedures Manual (MPM) for the use of maintenance personnel. The MPM and any subsequent amendments shall be approved by the Authority prior to use.
- B. The MPM shall be prepared and formatted to contain information set out in the Civil Aviation (Approved Maintenance Organisation) Regulations Part 6.

3. GENERAL

3.1 GENERAL INFORMATION

- A. The MPM is a maintenance organization document that defines the administration and management structure, organization capability, processes and general performance procedures and commitment to comply with the regulatory requirement on civil aircraft maintenance.
- B. It explains in detail the maintenance organisation responsibilities, regulatory processes, and methods the organization employs to satisfy and maintain the regulatory requirements.
- C. The MPM defines the maintenance organization structure, quality system management, maintenance activity coordination, duties, responsibilities, and qualification and training requirements of technical personnel.
- D. It states the organization maintenance capability, scope and competency.

Notes:

(i) The MPM is normally presented with all other required manuals during the Formal Application phase of the maintenance organization certification.

(ii) *The MPM provides the reference 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 used to develop manuals in a format acceptable to the Authority are explained in the TC 10-002 Reviewing, Accepting and Approving Manuals.*

3.2 MPM DEVELOPMENT AND PREPARATION

A. The maintenance organization MPM and subsequent amendments shall contain information, guidance and details for the use by maintenance personnel concerned. The information shall include procedures to be followed to satisfy the maintenance responsibility as required by the Civil Aviation Regulations.

B. The MPM shall include the following information which may be issued in one volume or separate parts depending on the size and capacity of the operator's maintenance activities in accordance with the requirements of regulation Part 6.10.E.05 of the Civil Aviation Regulations.

(1) A statement signed by the accountable manager confirming that the maintenance organisation procedures manual and any associated manuals define the OMA's compliance with this regulation and will be complied with at all times;

(2) A procedure to establish and maintain a current list of the titles and names of the management personnel accepted by the Authority. The list of personnel may be separate from the procedures manual but must be kept current and available for review by the Authority when requested;

(3) A list which describes the duties and responsibility of the management personnel and which matters on which they may deal directly with the Authority on behalf of the OMA;

(4) An organisation chart showing associated chains of responsibility of the management personnel.

(5) A procedure to establish and maintain a current roster of the personnel authorised to sign the maintenance release and the scope of their authorisation;

Note: The list of certifying personnel may be separate from the procedures manual but must be kept current and available for review by the Authority when requested.

(6) A description of the procedures used to establish the competence of maintenance personnel;

(7) A general description of manpower resources;

Note: Subparagraphs (1) to (7) constitutes the management part of the maintenance organisation Procedures Manual and therefore could be produced as one document and made available to person(s) who should be reasonably familiar with its contents.

(8) A description of the method used for the completion and retention of the maintenance records;

(9) A description of the procedure for preparing the maintenance release and the circumstances under which the release is to be signed;

- (10) A description, when applicable, of additional procedures for complying with an operator's maintenance procedures and requirements;
 - (11) A description of the procedures for complying with the service information reporting requirement contained in 6.10.E.50;
 - (12) A description of the procedure for receiving, amending and distributing within the maintenance organisation all necessary airworthiness data from the type certificate holder or the type design organisation;
 - (13) A general description of the facilities located at each address specified in the OMA's approval certificate;
 - (14) A general description of the OMA's scope of work relevant to the extent of approval;
 - (15) The notification procedure for OMA to use when requesting the approval of changes to the organisation of the OMA from the Authority;
 - (16) The amendment procedure for the OMA procedures manual, including the submission of all amendments for approval by the Authority and the circulation of copies to all organisations or persons to whom the manual has been issued;
 - (17) The OMA's procedures, acceptable to the Authority, to ensure good maintenance practices and compliance with all relevant requirements in this subsection;
 - (18) The OMA's procedures to establish and maintain an independent quality system to monitor compliance with, and the adequacy, of the procedures to ensure good quality maintenance practices and airworthy aircraft and aeronautical products, including the procedures for the feedback system to the person or group of persons specified in 6.10.D.05, and ultimately to the accountable manager to ensure, as necessary, corrective action;
 - (19) The OMA procedures for self-evaluations, including methods and frequency of such evaluations, and procedures for reporting results to the accountable manager for review and action;
 - (20) A list of operators, if appropriate, to which the OMA provides an aircraft maintenance service;
 - (21) A list of organisations performing maintenance on behalf of the OMA; and
 - (22) A list of the OMA's line maintenance locations and procedures, if applicable.
 - (23) Implementing Standard IS: 6.10.E.05 describes the detailed requirements concerning the maintenance procedures manual and a sample maintenance procedures manual format.
- C. An AMO Maintenance Procedures Manual shall be in a format as illustrated below in line with the requirements of regulation Implementing Standard of the Civil Aviation Regulations Part 6.10.E.05 :

MAINTENANCE PROCEDURES MANUAL FORMAT

Part 1 - Management

- 1.1 Corporate commitment by the accountable manager
- 1.2 Management personnel and their qualification
- 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 and Human Factors.
- 1.7 General description of the facilities at each address intended to be approved.
- 1.8 Organisation's 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 Aircraft maintenance program compliance
- 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 Rectification of defects arising during base maintenance
- 2.16 Release to service procedure
- 2.17 Records for the air carrier operator
- 2.18 Reporting of defects to the Authority/Operator/Manufacturer
- 2.19 Return of defective aircraft components to store
- 2.20 Defective components to outside contractors
- 2.21 Control of computer maintenance record systems
- 2.22 Reference to specific maintenance procedures such as:
 - (i) Engine running procedures,
 - (ii) Aircraft pressure run procedures,
 - (iii) Aircraft towing procedures,
 - (iv) Aircraft taxiing procedures.

Part L2 - Additional Line Maintenance Procedures

- 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

Part 3 - Quality System Procedures

- 3.1 Quality audit of organisation procedures
- 3.2 Quality audit of aircraft
- 3.3 Quality audit 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

Part 4 - Documentation

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

Part 5 - Appendices

- 5.1 Sample of documents
- 5.2 List of subcontractors
- 5.3 List of line maintenance locations

3.3 MPM APPROVAL

- A. The MPM should be submitted in duplicate to the Authority for approval (this is normally during the approval Formal Application phase of the maintenance organisation). It should be submitted with the Statement of Compliance document which identifies in what section of the MPM the applicable requirements of the regulations have been complied with.
- B. The Authority shall review the manual for acceptable format (i.e. ease of incorporating revisions, page numbering, table of content, list of effective pages, date of issue, issue number and distribution list), content scope and regulatory compliance using the Statement of Compliance.
- C. The manual is also checked for completeness and correctness of contents and adequate description of the procedures necessary for maintenance functions, the scope of the organization maintenance activities and that any referenced manual is available and adequate for the proposed use.
- D. 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.


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

- E. When the Authority is satisfied that the MPM meets the requirements the manual is issued with an approval or acceptance note. One copy of the approved MPM is returned to the operator, while the other is retained by the Authority

3.4 AMENDMENTS TO THE APPROVED MPM

- A. The AMO shall submit all proposed amendments of the MPM to the Authority for approval before implementation.

- B. The Authority will review all amendments, this review shall not be limited to the amendments alone, shall cover the impact of the changes on the overall manual system and the organisation.
- C. Continuous review of the manuals by the organisation is necessary. It facilitates timely amendment to reflect organisation development, regulatory and aviation environment changes.

Approved by: Board of Administration of INAC	
Date: <u>30/08/2012</u>	President of the Board  Marcos Angelo Vaz da Conceição (Aeronautic Engineer)