

CIVIL AVIATION PUBLICATION

AIR 07

MAINTENANCE ORGANISATION EXPOSITION - USER GUIDE



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MAINTENANCE ORGANISATION EXPOSITION – USER GUIDE

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1. INTRODUCTION

1.1 General

This CAP is applicable to CAR 145 applicants and Approved Maintenance Organisations (AMO) and designed to be used by maintenance organisations to assist them in the production of their MOE and by the CAA-B as a comparison document for MOEs submitted for approval.

The provisions of this user guide are complimentary to the requirements of CAR 145 and does not supersede or replace the associated regulatory requirements.

1.2 Preliminary Considerations

The MOE shall be customised by each organisation to demonstrate how they comply with:

- CAR 145
- CAR AIR 1.055(a)(3)
- CAR AIR 1.060
- CAR AIR 1.065(b)
- CAR AIR 1.070
- CAR AIR 1.080
- CAR AIR 1.090

For each detailed procedure described within the MOE, the CAR 145 organisation should address the following questions:

- What must be done?
- Who should do it?
- When must it be done?
- Where must it be done?
- How must it be done?
- Which procedure(s)/form(s) should be used?

The organisation may choose to use another format to the one described in this user guide, provided all the applicable sections of the regulation are addressed and cross-referenced.

1.3 Exposition Format and Language

- (a) The MOE may be produced in hardcopy or electronic format.
- (b) The MOE shall be in the English language

1.4 Terms Used

For the purpose of this CAP, the references to the MOE document are identified by the use of following terms:



- "MOE Part" is used to identify the main parts of the MOE (e.g. meaning Part 1 Management, Part 2 Maintenance Procedures etc.;
- "MOE chapter" is used to identify each chapter within an MOE Part (e.g. MOE 1.2 Safety and quality policy, MOE 3.2 Quality audit of aircraft etc.;
- "MOE paragraph" is used to identify a paragraph within an MOE chapter (e.g. MOE 3.4.1 "Aircraft certifying staff", MOE 1.4.1 "Accountable Manager", etc.).

1.5 Structure of the MOE

The MOE may be produced in the form of a single document or may consist of several separate documents.

Single document:

The standard MOE is a unique and complete document. It must contain all the information required to show compliance with the CAR 145.123 regulation including detailed maintenance procedures and detailed quality system procedures.

Several documents:

The MOE must contain at least the information as detailed in this CAP. Material may be published in separate documents which must be referenced from the MOE. In this case:

- The MOE shall cross refer to the associated procedures, documents, appendices, forms and all other lists which are managed separately (e.g. the list of certifying staff, the list of CAR OPS operators etc.).
- ▶ Therefore, the MOE chapter 1.11 is expected to summarise the associated procedures and/or lists references (refer to the chapter 1.11 for further guidance).
- These associated documents must meet the same rules as described for the MOE and shall not make reference to any other national approval.
- These associated document(s), procedure(s) and form(s) etc. shall be provided to and approved by the CAA-B (as part of the MOE).

In the case of separate documents/manuals, the MOE shall contain however a minimum information demonstrating compliance to the CAR 145 or CAR AIR 1 regulation. An MOE chapter only referring to an associated procedure is not acceptable.

For some organisations, certain sections of the headings defined may be 'not applicable'. In this case they shall be annotated as such within the MOE.

CAR 145 requires the MOE to be approved by the CAA-B but the safety management system must be acceptable to the CAA-B.



Therefore, the SMS should be described in a separate SMS Manual. Part 5 of the MOE simply identifies the SMS Manual document and describes the process for amendment and submitting it for CAA-B acceptance,

As the assigned CAA-B Inspector will be referring to this user guide when reviewing the MOE submitted by the Maintenance Organisation, a different structure will result in additional workload and time. Therefore, the Maintenance Organisation is strongly recommended to adhere to the MOE structure described in this CAP.

1.5.1 Management Control of the MOE

To properly monitor the approval, it is essential that the Organisation clearly identifies the initial edition of the Exposition and each subsequent change. Any change to the approved MOE shall be identified (depending from the numbering system chosen) by:

- (a) A new issue and/or revision number;
- (b) A new issue and/or revision date;
- (c) Clear identification of the modified text in each MOE chapter/paragraph (e.g. using vertical bars, highlighting with a specific colour the changed text, etc.)

The MOE 1.11 chapter is intended to detail the methods chosen to identify changes to the MOE (e.g. issue/revision number, vertical bars, etc.).

1.5.2 Exposition Page Presentation

Each page of the MOE shall be identified as follows (this information may be added in the header or footer), as applicable depending on the MOE revision identification option chosen in the previous chapter of this CAP:

- the name of the organisation (official name as defined on the Form AIR 025, CAR 145 Approval Certificate);
- the issue number of the MOE;
- the issue date;
- the revision number of the MOE;
- the revision date;
- the chapter of the MOE (i.e. 1-5);
- the page number;
- the name of the document "Maintenance Organisation Exposition";

The cover page of the MOE volume shall specify:



- the title "The Bahamas CAR 145 Maintenance Organisation Exposition";
- The name of the organisation (the official one defined on the Form AIR 025, CAR 145 Approval Certificate);
- The address, telephone, fax numbers and the generic e-mail address of the organisation to be approved by the CAA-B
- > The copy number from the distribution list;
- > The approval reference of the CAR 145 organisation;

1.6 MOE Initial Approval Process

1.6.1 First Submission of the 'Draft' MOE

Prior to submission of the 'draft' MOE to the CAA-B for approval, the Accountable Manager must sign and date the Corporate Commitment statement (MOE chapter 1.1). This confirms that they have read the document and understand their responsibilities under the approval. In the case of change of the Accountable Manager the new incumbent shall sign the document and submit a suitable amendment to the CAA-B for approval.

1.6.2 Tracking Changes to the Initial 'Draft' MOE

Following the receipt of the first 'draft' MOE, the CAA-B will review it and formulate eventual remarks in writing to the maintenance organisation.

At the receipt of such remarks, the maintenance organisation is expected to revise the first 'draft' and produce a second 'draft' MOE, where all the remarks have been addressed. In order to have a clear tracking of the changes and to allow the review of the revised MOE by the CAA-B, the following is expected:

- The maintenance organisation shall reply in writing to each remark explaining how it has been addressed and in which MOE chapter/paragraph;
- > The maintenance organisation shall issue a second 'draft' MOE, which clearly identifies the changes introduced. This could be done by:
 - Maintaining the MOE 'draft' identified as 'initial' (i.e. Issue 1, Rev. 0), but changing the date to identify the new draft issued, or;
 - Identifying clearly the text modified in each MOE chapter/paragraph (e.g. using vertical bars, highlighting with a specific colour the changed text, etc.)

This process will be eventually continued with the issue of a third, fourth, etc. 'draft' MOE, until the Exposition is considered acceptable by the CAA-B in order to proceed further with the technical investigation process.



Note: The same principle applies to the successive revisions of the MOE and to the documents associated to the exposition such as procedures and lists subject to CAA-B approval.

1.7 MOE Structure and Content

The MOE structure and content is contained in the following Appendix 1



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APPENDIX 1

EXAMPLE OF STRUCTURE AND CONTENT OF MOE

PART 0 - INTRODUCTION

0.1 Table of Contents

For standardisation purposes and to facilitate the production of the MOE by the CAR 145 maintenance organisation the CAA-B strongly recommends adoption of the following format for the MOE. The maintenance organisation should customise the document to suit their organisation and may add pages/paragraphs as necessary.

Example:

PART 0 INTRODUCTION

- 0.1 Table of Contents
- 0.2 List of Effective Pages
- 0.3 List of Issues / Amendment Record of Revisions
- 0.4 Distribution
- 0.5 Definitions and Abbreviations

PART 1 MANAGEMENT

- 1.1 Corporate Commitment by the Accountable Manager
- 1.2 Quality and Safety Policy
- 1.3 Management Personnel
 - 1.3.1 Accountable Manager
 - 1.3.2 Quality Manager
 - 1.3.3 Planning Manager
 - 1.3.4 Procurement Manager
 - 1.3.5 Production Manager
 - 1.3.6 Independent Auditors (if applicable)
 - 1.3.7 Safety Manager
 - 1.3.8 Other Key Personnel as Determined by the Organisation
- 1.4 Duties and Responsibilities of Management Personnel
 - 1.4.1 Accountable Manager
 - 1.4.2 Quality Manager
 - 1.4.3 Planning Manager
 - 1.4.4 Procurement Manager
 - 1.4.5 Production Manager
 - 1.4.6 Independent Auditors
 - 1.4.7 Safety Manager
- 1.5 Management Organisation Chart
- 1.6 List of Certifying Staff
 - 1.6.1 Management of the List of Certifying Staff
- 1.7 Manpower resources
 - 1.7.1 Aircraft Maintenance
 - 1.7.2 Line Stations
 - 1.7.3 Quality Department

Page No.



- 1.7.4 Technical Support Staff
- 1.7.5 Specialist Activities
- 1.7.6 Contracted Staff
- 1.8 Facilities
 - 1.8.1 Address for Official Communications
 - 1.8.2 Maintenance Facilities
 - 1.8.3 Line Maintenance Facilities (*if applicable*)
- 1.9 Scope of Work
 - 1.9.1 Aircraft Maintenance Scope of Work
 - 1.9.2 Other Specialist Activities
 - 1.9.3 Maintenance away from the Approved Locations
- 1.10 Notification Procedure to the CAA-B Regarding Changes to the Organisation
 - 1.10.1 Notification to the CAA-B
 - 1.10.2 Management of the Change
- 1.11 MOE Amendment Procedure 1.11.1 MOE Amendment

PART 2 MAINTENANCE PROCEDURES

- 2.1 Sub-Contract Control Procedures
- 2.2 Acceptance / Inspection of Aircraft Components and Materials from Outside Sources
 - 2.2.1 Component /Material Certification
 - 2.2.2 Receiving Inspection Procedure
- 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 Tooling
- 2.7 Cleanliness Standards of Maintenance Facilities
- 2.8 Maintenance Instructions and Relationship to Aircraft Manufacturer's Instructions Including Updating and Availability to Staff
 - 2.8.1 Maintenance Data Coming from External Sources
 - 2.8.2 Documentation / Maintenance Instructions Issued by the Maintenance Organisation
- 2.9 Repair procedure
 - 2.9.1 Repairs
- 2.10 Aircraft Maintenance Programme Compliance
- 2.11 Airworthiness Directive Procedure
- 2.12 Optional Modification Procedure
- 2.13 Maintenance Documentation in use and its Completion
- 2.13.1 Maintenance Documentation in Use
- 2.14 Technical records
- 2.15 Rectification of Defects
- 2.16 Release to Service Procedure
- 2.17 Records for the Operator
- 2.18 Reporting of Defects to the CAA-B/Operator/Manufacturer
- 2.19 Return of Defective Aircraft Components to Stores
- 2.20 Defective Components to Outside Contractors

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- 2.21 Control of Computer Maintenance Records System
- 2.22 Control of Man-Hour Planning versus Scheduled Maintenance Work
- 2.23 Control of Critical Tasks (Independent Inspections)
- 2.24 Reference to Specific Maintenance Procedures
- 2.25 This Chapter is Not Used
- 2.26 Shift / Task Handover Procedure
- 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

- L2.1 Line Maintenance Control of Aircraft Components, Tools and Equipment etc.
- L2.2 Line Maintenance Procedure Relating to Servicing
- L2.3 Line Maintenance Control of Defects and Repetitive Defects
- L2.4 Line Procedure for Completion of the Technical Log
- L2.5 Line Procedure for Pooled Parts and Laon Parts
- L2.6 Line Procedure Control of Defective Parts Removed from the 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 (and/or Equipment)
- 3.3 Quality Audit Remedial Action Procedure
- 3.4 Certifying Staff Qualification, Training and Competence Procedure
- 3.5 Certifying Staff Records
- 3.6 Quality Audit Personnel
- 3.7 Qualifying Inspectors
- 3.8 Qualifying Mechanics
- 3.9 Aircraft or Aircraft Component Maintenance Task Exemption Process Control
- 3.10 Concession Control for Deviation from the Organisation's Procedures
- 3.11 Qualification Procedure for Specialised Activities such as NDT, Welding etc.3.11.1 NDT Personnel
 - 3.11.2 Other Specialised Activities (e.g. welders, painters etc.)
- 3.12 Human Factors Training Procedure
- 3.13 Competence Assessment of Personnel

PART 4 CONTRACTING OPERATORS

- 4.1 Contracting Operators
- 4.2 Operator Procedures and Paperwork
- 4.3 Operator Record Completion

PART 5 SAFETY MANAGEMENT SYSTEM

- 5.1 SMS Manual Document Reference
- 5.2 SMS Manual Amendment

PART 6 APPENDICES

- 6.1 Sample of Documents
- 6.2 List of Contracted CAR OPS Operators
- 6.3 List of Sub-Contractor Organisation (Ref CAR 145.125(b)



Note: Where a Part is not used it shall be shown in the Exposition as <u>Not Applicable.</u>



0.2 List of Effective Pages

This list of issue/revision shall allow traceability from the previously approved version. The name of the organisation, the date of review, approval and the name of the person who has reviewed, approved the MOE should be included.

Example:	The example below identifies both an issue number and revision number. It may be that
	the organisation chooses to just have a revision number and no Issue numbers.

Page No.	Issue No.	Revision No.	Revision Date	Page No.	Issue No.	Revision No.	Revision Date	
		PART 0		121	1	1	01/01/07	
001	2	0	01/01/12	122 1		1	01/01/07	
002	2	0	01/01/12			PART 2		
003	2	0	01/01/12	201	1	0	19/12/06	
004	2	0	01/01/12	202	1	0	19/12/06	
005	2	0	01/01/12	203	1	0	19/12/06	
006	2	0	01/01/12	204	1	0	19/12/06	
007	2	0	01/01/12	205	1	0	19/12/06	
008	2	0	01/01/12	206	1	0	19/12/06	
009	2	0	01/01/12	207	1	1	01/01/07	
		PART 1				PART L2		
101	1	0	19/12/06	L201	1	0	19/12/06	
102	1	0	19/12/06	L202	1	0	19/12/06	
103	2	0	01/01/12	L203	1	0	19/12/06	
104	1	1	01/01/07	L204	L204 1		19/12/06	
105	1	1	01/01/07			PART 3		
106	1	0	19/12/06	301	2	0	01/01/12	
107	1	1	01/01/07	302	2	0	01/01/12	
108	1	1	01/01/07	303	1	1	01/01/07	
109	2	0	01/01/12	304	1	1	01/01/07	
110	1	1	01/01/07	305	1	0	19/12/06	
111	1	0	19/12/06	306	1	0	19/12/06	
112	1	1	01/01/07	307	1	0	19/12/06	
113	1	0	19/12/06	308	1	0	19/12/06	
114	1	0	19/12/06		·			
115	1	1	01/01/07	401 2		0	01/01/12	
116	1	0	19/12/06	402	2	0	01/01/12	
117	1	0	19/12/06	403 2		0	01/01/12	
118	1	0	19/12/06			PART 5		
119	1	0	19/12/06	501	2	0	01/01/12	

MOE Issue 2 Revision 0 dated 01/01/12

MOE internal approval

Approved by (name & position):

Date:



0.3 List of Issues / Amendment Record of Revisions

Example: the example below is related to an MOE identified by both an Issue number and a Revision number. If the revision system always raises the whole MOW in Issue then only the issue dates and reason for the change need be recorded.

lssue number	Issue date	Revision number	Revision date	Reason for change
1	19/02/21	0	19/02/21	N/A
1		1	01/01/22	New procedure for parts procurement
2	01/12/22	0	01/12/22	Change of Quality Assurance Manager and extension of the scope of approval

0.4 Distribution List

Example: the example below is for organisations that use a mix of hardcopies and CD-ROM. For those who only publish their MOE on an intranet then an MOE COPY NUMBER is not required.

MOE COPY NUMBER	MOE HOLDER	FORMAT
Copy No. 1	Accountable Manager	CD-ROM
Copy No. 2	Quality Manager	PAPER
Сору № 3	Planning Manager	CD-ROM
Copy No. 5	Procurement Manager	CD-ROM
Copy No. 5	Productions Manager	CD-ROM
Copy No. 6	Safety Manager	PAPER
Copy No. 7	Independent Auditor	CD-ROM
Copy No. 8	CAA-B	CD-ROM
Copy No. 8	Reserved	

0.5 Definitions and Abbreviations

This Chapter should contain a list of all the definitions and abbreviations used in the MOE



PART 1 - MANAGEMENT

1.1 Corporate Commitment by the Accountable Manager

This Exposition and any associated referenced manuals define the organisation's compliance with CAR 145 and CAR AIR 1.

They are approved by the undersigned and must be complied with at all time and when work/orders are being progressed under the terms of the CAR 145 approval.

It is accepted that these procedures do not override the necessity of complying with any new or amended regulation published by the CAA-B from time to time where these new or amended regulations are in conflict with these procedures.

It is understood that the CAA-B will approve this organisation whilst the CAA-B is satisfied that the procedures are being followed and work standards maintained. It is further understood that the CAA-B reserves the right to suspend, limit or revoke the CAR 145 approval of the organisation if the CAA-B has evidence that procedures are not followed or standards not upheld.

Signed_

Dated

Accountable Manager__(quote position) _____

For and on behalf of ____(quote organisation's name)_

In accordance with CAR 145.123(a), if the Accountable Manager is not the highest level responsible of the organisation, the latter must then countersign the statement.

Whenever the Accountable Manager is changed it is important that the new Accountable Manager signs the statement at the earliest opportunity as part of his/her acceptance by the CAA-B.



1.2 Quality and Safety Policy

Refer	to	CAR	145.121.	The	Quality	and	Safety	Policy	should	as a	a minimum	include	а	statement
committing the organisation to:														

Applying human Factors principles
Encourage personnel to report mainte

Encourage personnel to report maintenance related errors/incidents through the safety management system

	Deer
	Кесс

ecognise safety as a prime consideration always, for all the staff

Recognise that compliance with procedures, quality standards and regulations is the duty of all personnel

Ensure that safety standards are not reduced by commercial imperatives

Ensure good use of resources and pay particular attention to carry out correct maintenance at the first attempt

Not to apply disciplinary actions to persons unless it involves an illegal act, a deliberate violation of a safety related requirement for compliance or gross negligence

promote a positive safety culture

1.3 Management Personnel

This chapter shall identify the maintenance management personnel of the organisation by listing, as minimum, the title and names of the Accountable manager plus the title and names of all the persons nominated to hold a position as required by CAR 145.105

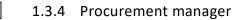
Their respective deputies have also to be identified. The group of "nominated persons" shall be chosen/identified so that all the CAR 145 functions are covered under their respective responsibilities and their credentials shall be submitted to the CAA-B using a Form AIR 025.

The list of management personnel should also include the titles and names of those persons who deputise for the principle managers in their absence.

The MOE chapter 1.3 needs to remain, at all times consistent, with the MOE chapters 1.4 and 1.5 and shall represent the up- to-date description of the maintenance management structure of the organisation.

- 1.3.1 Accountable Manager
-] 1.3.2 Quality manager
- 1.3.3 Planning Manager





1.3.5 Production Manager

- 1.3.6 Independent Auditors (*if applicable*)
- 1.3.7 Safety Manager
 - 1.4.8 Other Key Personnel as Determined by the Organisation

1.4 Duties and Responsibilities of Management Personnel

The duties and responsibilities of all management personnel identified in the MOE chapter 1.3 must be detailed in this chapter. It shall be ensured that all CAR 145 functions are addressed, as applicable to the organisation.

The responsibilities of a Nominated person cannot be delegated to other Manager(s), unless such Manager(s) is/are identified as "Deputy Nominated Person" for the related function.

The duties of any Nominated Person may be delegated to other Manager(s) who are reporting to him/her.

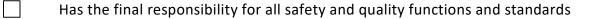
The MOE chapter 1.4 needs to remain at all times consistent with the MOE chapters 1.3 and 1.5 and shall represent the up- to-date description of the maintenance management structure of the organisation.

Any additional duties and responsibilities may be added to those below provided they do not conflict with those of the other management personnel. Depending on the structure of the organisation some duties may be distributed differently

The duties and responsibilities in the following lists are not necessarily exhaustive.

1.4.1 Accountable Manager

- Responsible for ensuring that all necessary resources are available to accomplish maintenance in accordance with the CAR 145 requirements and the organisation's exposition.
 - Has ultimate responsibility for operational standards and compliance with the relevant regulations.
 - Responsible for ensuring that the necessary finance, manpower resources and facilities are available to enable the company to perform maintenance to which it is committed for contracted operators and any other work which may be undertaken.



Responsible for the establishment and promotion of the safety and quality policy specified in CAR 145.121(a)



Must be able to demonstrate a basic understanding of the CAR 145 requirements

Responsible for ensuring the establishment of an effective safety management system to the satisfaction of the CAA-B

Will hold regular meetings with staff to check on the progress on rectifying Quality Audit Findings and safety issues identified through the Safety Management System

Responsible for submitting amendments to the SMS manual to the CAA-B for their acceptance;

1.4.2 Quality Manager

The Quality Manager is responsible for establishing an independent quality assurance system to monitor compliance of the CAR 145 organisation with CAA-B requirements;

Shall have direct access to the Accountable Manager on matters concerning the quality system;

Defines the human factors principles to be implemented within the organisation;

Responsible for implementing a quality audit programme in which compliance with all maintenance procedures is reviewed at regular intervals in relation to each type of aircraft maintained (including the management and completion of audits and production of audit reports). He/she should ensure that any observed non-compliances or poor standards are brought to the attention of the person concerned via his/her manager;

Responsible for monitoring amendments to the CAA-B requirements and ensuring that the MOE and any associated documents reflect how compliance is achieved;

Responsible for follow up and closure of any non-conformances identified;

The Quality Manager establishes regular meetings with the Accountable Manager to appraise the effectiveness of the quality system. This will include details of any reported discrepancy not being adequately addressed by the relevant person or in respect of any disagreement concerning the nature of a discrepancy;

Responsible for preparing standard practices and procedures (MOE, including the associated procedure(s) for use within the organisation and ensuring their adequacy regarding CAR 145 and any amendments to the Regulations;

Responsible for submission of the MOE and any associated documents approval including any Form AIR 025 to the CAA-B for their approval or acceptance;

A separate SMS manual should be submitted by the Accountable Manager



Responsible for assessing Sub-contractors and suppliers of new and used components and materials for satisfactory product quality in relation to the needs of the organisation;
ssessment may be done in conjunction with the Safety Manager as part of the Safety gement System procedure for assessing the risks associated with the activities.

Responsible for the issue /renewal/cancellation of CAR 145 Authorisations;
Responsible for co-ordinating action on airworthiness occurrences and for initiating any necessary further investigation and follow-up activity;
Responsible for establishing feedback from maintenance incidents/issues and feeding these back into the continuation training programme;
Responsible for assessing subcontractors working under the organisation's quality system and maintaining the expertise necessary to be able to do so, to the satisfaction of the CAA-B.
Responsible for assessing external specialist services required to be used by the organisation in the performance of maintenance;
Coordinating Quality Findings with the Safety Manager where safety issues are identified;
Ensuring that Quality Auditors are independent, trained and competent to undertake the Quality Assurance tasks they perform;
Ensuring that all staff that ultimately report to the Quality Manager are assessed for their competence before unsupervised work commences and that competence is assessed on a continuous basis;
Ensuring that records are retained for all staff ultimately reporting to the Quality Manager of such qualifications and competence assessment;
Identify applicable requirements, regulations and standards and demonstrate compliance with them;
Ensure technical manuals, checklists and other documentation are appropriately maintained and incorporate the latest amendments;
Ensure that training programmes maintain staff proficiency and competency;
Ensure that training programmes maintain staff proficiency and competency;
Ensuring that the quality monitoring compliance function man hours is sufficient to meet the requirement of CAR 145.121(c) and that it is regularly reviewed;

Authorised to communicate directly with the CAA-B;



Approving the	use	of	alternate	tooling	to	that	prescribed	by	the	OEM	or	Туре
Certificate Hold	er;											

He/she must be able to demonstrate a thorough knowledge of the CAR 145 requirements and the MOE procedures applicable to the responsibilities held.

1.4.3 Planning Manager

Responsible for	ensuring	a clear	work d	order	contract	is ir	place	before	contracte	d
work commence	es;									

Ensuring that maintenance instructions are developed in line with human factors principles, taking account of available human resources, facilities, tooling and the coordination and scheduling of tasks.

Manage the maintenance man-hour plan that ensures the organisation has sufficient staff to plan, perform, supervise, inspect and certify the work in accordance with the requirements of the approval.

Ensuring that applicable and up to date approved maintenance data relevant to the work to be undertaken is readily available for the use of staff in performance of intended work.

Ensuring that a common work card system is used and the system complies with CAR 145.111(d)

Ensuring that all staff that ultimately report to the Planning Manager are assessed for their competence before unsupervised work commences and that competence is assessed on a continuous basis;

Ensuring that records are retained for all staff ultimately reporting to the Planning Manager of such qualifications and competence assessment;

Scheduling maintenance work ensuring that the necessary personnel, tools, equipment, material, maintenance data and facilities will be available;

Identifying any additional training that staff need in order to remain competent;

He/she must be able to demonstrate a basic understanding of the CAR 145 requirements and a thorough knowledge of the MOE procedures applicable to the responsibilities held.

1.4.4 Procurement Manager

Performing the incoming inspection of components, parts, materials, tools and equipment, the related classification, segregation and storage according to the manufacturer's recommendations;



		Ensuring that all staff that ultimately report to the Procurement Manager are assessed for their competence before unsupervised work commences and that competence is assessed on a continuous basis;
		Ensuring that records are kept for all staff ultimately reporting to the Procurement Manager of such qualifications and competence assessment;
		Identifying any additional training that staff need in order to remain competent;
		Ensuring that the storage facilities meet the requirements of CAR 145.103(e) and AMC 145.103(e)
		He/she must be able to demonstrate a basic understanding of the CAR 145 requirements and a thorough knowledge of the MOE procedures applicable to the responsibilities held.
1.4.5	Produ	ction Manager
		Ensuring the availability of all necessary maintenance data as required by CAR 145.111;
		Recording and notifying any inaccurate, incomplete or ambiguous procedure, practice information or maintenance instruction contained in the maintenance data used by

Supplying	the	necessary	technical	documents	for	customers	and	storage	of	the
organisatio	on's to	echnical re	cords;							

maintenance personnel to the author of maintenance data;

Providing a common work card or worksheet system to be used throughout relevant
parts of the organisation and ensuring such documents comply with CAR 145.111(d);

insure that copies of up to date manuals and required documentation is held and
vailable to personnel at all locations where the need access to such information;

]	Ensuring that all staff that ultimately report to the Production Manager are assessed
	for their competence before unsupervised work commences and that competence is
	assessed on a continuous basis;

	Identifying any	additional	training that	staff need in	order to remain	n competent;
--	-----------------	------------	---------------	---------------	-----------------	--------------

Ensuring that records are retained for all staff ultimately reporting to the Production
Manager of such qualifications and competence assessment;

Ensuring that a copy of the operator's current Maintenance Control Manual, is available at all locations where the staff need access to such information prior to work on behalf of the operator commences;

Ensuring that all tools, equipment are controlled, calibrated and that records are kept;



Ensuring that all the necessary equipment, tools and material to perform the CAA-B approved scope of work is available

He/she must be able to demonstrate a basic understanding of the CAR 145 requirements and a thorough knowledge of the MOE procedures applicable to the responsibilities held.

1.4.6 Independent Auditors

Responsible for the conduct of independent audits as coordinated and managed by the Quality Manager

He/she must be able to demonstrate a thorough knowledge of the CAR 145 requirements and the MOE procedures applicable to the responsibilities held.

1.4.7 Safety Manager

Responsible for the implementation and maintenance of the Safety Management System;



He/she shall have direct access to the Accountable Manager on matters concerning safety and the Safety Management system;

He/she is responsible for monitoring amendments to the CAA-B requirements and ensuring that the SMS Manual and any associated documents reflect how compliance is achieved;

He/she is authorised to communicate directly with the CAA-B;

Ensuring that all staff that ultimately report to the Safety Manager are assessed for their competence before unsupervised work commences and that competence is assessed on a continuous basis;

He/she must be able to demonstrate a basic understanding of the CAR 145 requirements and a thorough knowledge of the Safety Management System and company procedures applicable to the responsibilities held.

1.5 Management Organisation Chart

The organisation chart shall show the associated chains of responsibility of the "nominated persons" identified in Chapter 1.3. When other "Managers" are identified in chapter 1.3 they need also to be reflected in the organisation chart to show that they report ultimately through a "nominated person" to the Accountable Manager.

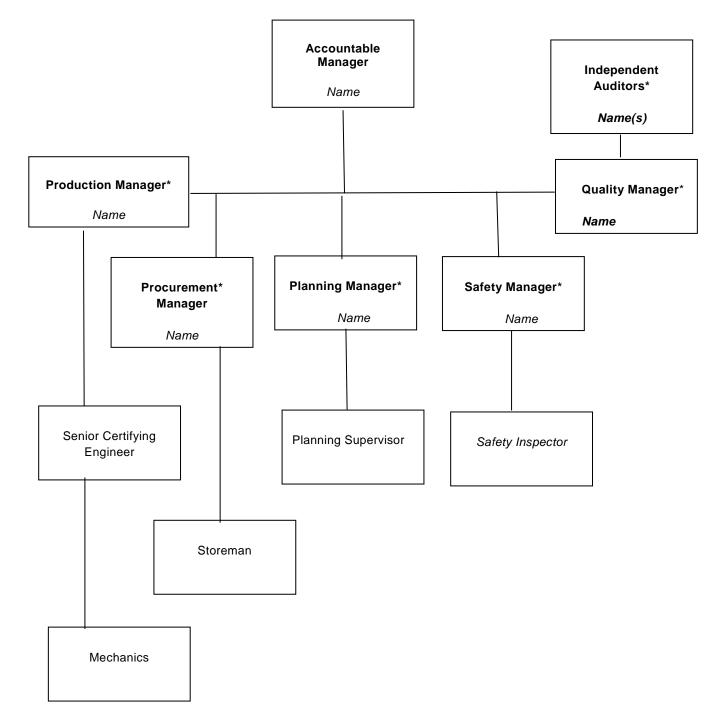
The Organisation chart of this chapter needs to be at all times consistent with the MOE chapters 1.3 and 1.4 and shall represent the up to date description of the maintenance management structure of the organisation.

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Below is an example of a CAR 145 Approved Maintenance Structure:



Those identified with an asterisk (*) are required to be approved by the CAA-B and a Form AIR 025 is required.

All key personnel which are required to have a Form AIR 025 approved must appear on the organisational chart

The names of those persons holding positions in bold are required to have their names included on the chart.



the licence

1.6 List of Certifying Staff

It is possible to cross-refer from this paragraph 1.5 to another record (including a computer record) where a list of the names is kept. If the organisation's individual staff authorisation records are referred to as the "list", they should be preceded by a summary listing all the staff names included, thereby meeting the intent of the CAR 145 requirement.

The list must include the following information:

Full name
Maintenance Technician Licence number and State that issued
Company Authorisation number
Date of the first issue of the Authorisation
Scope/limit of the Authorisation

A copy of the Authorisation holder's signature

1.6.1 Management of the List of Certifying Staff

This procedure shall detail the following



Identification of who is responsible for managing the list(s)



Retention of records, duration, location

Documents retained that were in support of the issuance of the Authorisation, e.g. licence, training records, company competence assessment etc.

1.7 Manpower Resources

The numbers of personnel shall be provided so that a clear picture of the adequacy of staffing levels can be demonstrated without the need for amendment as a result of routine fluctuations. The system must however, be able to highlight any significant re-deployment or loss of staff. The system shall also address the numbers of specialist staff in each department (as applicable).

1.7.1	Aircraft Maintenance. Certifying staff, non-certifying mechanics
1.7.2	Line Stations
1.7.3	Quality Department
1.7.4	Technical Support Staff. Engineering, Administration, Planning, Librarian, Storekeeper etc.



1.7.5 Specialist Activities Aircraft weighing, painting etc.

1.7.6 Contracted Staff Contracted staff to be considered are all external staff who are not directly or permanently employed by the maintenance organisation and who are involved in the maintenance activities. Only the long term contracted staff need to be considered under this chapter.

The organisation must be able to demonstrate that they have adequate resources to justify the grant of an approval as defined in chapter 1.8 (facilities to be approved) and 1.9 (scope of work). The system used must be presented in sufficient detail to explain the support at each site and for each function as required by CAR 145.105(e) and AMC 145.105(e)

The organisation shall declare the number of staff needed to comply with CAR 145 requirements.

Maintenance Organisations shall ensure the number of staff declared in this MOE and the latest application Form 2 remains constant.

1.8 Facilities

This section shall describe each of the approved facilities, in some detail, at which the organisation intends to carry out maintenance and comply with CAR 145.103 and the associated AMC. This shall provide a clear picture of what the CAA-B is approving. All sites shall be covered; however, a different emphasis can be placed on sites dependent on the level of work undertaken.

The system of protection against weather, dust and other airborne contaminants (paint, smoke...), ground water protection, heating/air conditioning, lighting, noise protection, safety system (limited accesses, fire, staff security...) should be described either in the diagram or in the associated text.

1.8.1 Address for Official Communications

The postal address of the maintenance organisation to be used by the CAA-B for formal mail communication needs to be clearly identified.

In addition, to ensure an efficient and stable communication channel between the CAA-B and the maintenance organisation, the organization shall create a "generic" email address (without reference to a personal name) to be used regardless of any future personnel changes.

1.8.2 Maintenance Facilities



Hangar accommodation (*if applicable*)

Specialised workshops





Office accommodation Stores

1.8.3 Line Maintenance Facilities (*if applicable*)



Office accommodation

] Stores

Vehicles for ramp access

1.9 Scope of Work

This chapter must show the range and scope of work carried out at each approved site. When a maintenance organisation is performing maintenance in multiple locations the corresponding scope of work must be detailed for each site. This shall also relate to chapters 1.8 in such a way that it can be clearly seen which specific tasks are performed at each location.

1.9.1 Aircraft Maintenance Scope of Work

1.9.2 Other Specialised Activities

This would include such things as welding, painting, aircraft weighing, NDT etc.

1.9.3 Maintenance away from the Approved Locations

CAR 145.125 only allows for maintenance to be conducted away from the CAA-B approved locations providing the organisation has a procedure in the MOE approved by the CAA-B. So, this privilege in the scope of work can only be included if there is a procedure acceptable to the CAA-B in MOE 2.24

1.10 Notification Procedure to the CAA-B Regarding Changes to the Organisation

The CAA-B approval is based on the management, organisation, resources, facilities and scope of work described in Part 1 of the Exposition. Any significant change may therefore affect the conditions under which the approval was granted. This chapter is intended to show the process to be used by the Organisation to notify the CAA-B of any changes affecting the approval.

1.10.1 Notification to the CAA-B

This paragraph should state that the CAA-B will be informed of the following proposed changes to the organisation:



Change of the organisation's name

.

The location of the organisation including any approved facilities and sites



	Any additional sites of the organisation
	The Accountable Manager
	Any of the senior persons specified in MOE chapter 1.3 (CAR 145.105(b)
	The scope of the maintenance approval
	The locations at which maintenance is carried out
	The procedure for the authorising of persons to certify maintenance
	Any change to the equipment, tools or materials that could affect the approval
	Changes to the number of certifying staff such that the scope of work in MOE chapter 1.9 cannot be fulfilled
In add	ition, this procedure shall also detail:
	When to notify the CAA-B of the changes
	How to notify the changes



Who in the organisation is responsible for notifying of the changes



Where to send the notification

1.10.2 Management of the Change

When the change has been notified to the CAA-B the organisation shall detail how the change is managed:



Internal audit by the Quality system.



Amendments to the MOE and any associated documents.

Involvement of the Safety Manager to conduct the management of change process in accordance with the safety management system.



Who in the organisation is responsible for monitoring the change(s) and coordinating the changes with the CAA-B.

1.11 MOE Amendment Procedure

The Quality Manager is responsible for reviewing the MOE on a regular basis and amending if necessary. This includes any associated procedure manuals, and the submission of proposed amendments to the CAA-B.



1.11.1 MOE Amendment

This procedure shall at least address the Exposition amendment procedure.



Person responsible for amending the Exposition and any associated manuals and documents.



Internal vetting and approval process for amendments.

Person responsible for submitting amendments to the CAA-B and coordinating their approval.

The definition of what constitutes a new issue to the MOE and what constitutes a revision to the MOE



PART 2 – MAINTENANCE PROCEDURES

2.1. Sub-Contract Control Procedures

This chapter shall be clearly structured to cover all the cases where the maintenance organisation is using the services of other organisations under the provisions of CAR 145.125(b).

If applicable this paragraph shall describe how the maintenance organisation will contract part of the maintenance to another organisation not holding a CAR 145 or CAA-B accepted approval. All such "Sub-contractors" shall be listed in the MOE chapter 6.3.

If the maintenance organisation does not intend to exercise the privileges of CAR 145.125(b), this chapter can be identified as "Not Applicable"

2.2. Acceptance / Inspection of Aircraft Components and Materials from Outside Sources

This chapter shall refer to the procedures and standards relating to parts and materials intended to be installed on the aircraft.

2.2.1 Component / Material Certification

This chapter is expected to identify the release documents to be expected/accepted for each type of part/material depending from their status (new/used). It is recommended to develop a table listing all the cases, for easy reference to receiving inspection personnel.

No component may be fitted unless it is in a satisfactory condition, has been appropriately released to service accompanied by an acceptable form of documentation.

Standard parts can only be fitted to an aircraft or a component when the maintenance data specifies the particular standard part. Standard parts shall only be fitted when accompanied by evidence of conformity traceable to the applicable standard.

Material being either raw material or consumable material shall only be used on an aircraft or a component when the aircraft or component manufacturer states so in relevant maintenance. Such material shall only be used when the material meets the required specification and has appropriate traceability.

All material must be accompanied by documentation clearly relating to the particular material and containing conformity to specification statement plus, both the manufacturing and supplier source.

Below are tables describing what documentation is required for each type of part from the different acceptable sources.



NEW PARTS		
Type of Part	Documents required	
Components from an EU Manufacturer	EASA Form 1	
Components from a USA Manufacturer	FAA Form 8130-3	
Components from a Brazilian Manufacturer	An Authorised Release Certificate Form 003 issued by an organisation approved by the Brazilian Civil Aviation Authority (ANAC)	
Components from a Canadian Manufacturer	An Authorized Release Certificate TC Form 24-0078 or TC Form One issued by an organisation approved by Transport Canada	
Components from a UK Manufacturer	CAA Form 1	
PMA Parts	 FAA Form 8130-3 is required the CAA-B will accept FAA PMA parts in accordance with EC Decision 2007003/C the CAA-B will accept PMA parts when the part is non-critical (Note: consult the EC Decision 2007003/C for a correct definition of critical) The FAA Form 8130-3 should state in the "Remarks" field "This PMA Part is not a critical component." 	
Standard Parts	A Certificate of Conformity showing evidence of conformity, traceable to the applicable standard.	
Consumables	A statement of conformity with the specification/name of the product stated, plus the manufacturer and supplier source.	
Raw Material	A statement of conformity with the specification stated, plus the manufacturer and supplier source.	

MAINTAINED PARTS		
Type of Part	Documents required	
Components from an EASA approved Repair Station	EASA Form 1	
Components from a FAR 145 approved Repair Station	FAA Form 8130-3	
Components from a Transport Canada CAR 573 approved Repair Station	Transport Canada Form TCCA 24-0078 or TC Authorized Release Certificate Form One release documents number.	
For components	CAA Form 1	



from a UK CAA approved repair station	
PMA Parts	 FAA Form 8130-3, or EASA Form 1 the CAA-B will accept FAA PMA parts in accordance with EC Decision 2007003/C the CAA-B will accept PMA parts when the part is non-critical (Note: consult the EC Decision 2007003/C for a correct definition of critical) The FAA Form 8130-3 should state in the "Remarks" field "This PMA Part is not a critical component."
Standard Parts	Not applicable
Consumables	Not applicable
Raw Material	Not applicable

2.2.2 Receiving Inspection Procedure



Incoming inspection For Components / Materials/ Standard Parts received from external sources.

- Required documentation
- Compliance with order / condition
- Conformity with company requirements (e.g. type of release requested, Sources
- Identification of parts/material after receiving inspection (e.g. tag)
- Materials/standard parts received in batches and related traceability (e.g. split of batches)
- Traceability of parts and materials to the related documentation (e.g. internal tracking number)
- Receiving inspection records
- "Quarantine" procedure
- Modification Standard and AD compliance
- Identification of storage limitation/life limits



Acceptance and incoming inspection of components from internal sources (e.g. transfer between stores, from the workshops):

- Conformity with company requirements,
- Records



- Required documentation
- Compliance with order, condition,
- "Quarantine" procedure
- Identification of storage limitation/life limits

Procedure of treatment of a suspected unapproved part

- Identification
- Record
- notification to the CAA-B
- Form GEN 01 used (e.g. refer to the MOE 2.18 occurrence reporting procedure/form)

2.3 Storage, Tagging and Release of Aircraft Components and Material to Aircraft Maintenance

Procedures for maintaining satisfactory storage conditions (including environmenta
conditions, security and segregation) of:

- Routable
- Perishables, raw material
- Flammable fluids
- Engines
- Bulky assemblies
- Record of position in the store (s)
- Etc.
- System and procedure to control shelf life / Life limit and modification standard.
- Special storage requirements (condition and limitation) e.g.: ESD sensitive devices, rubber.
- Tagging / labelling system and storage areas
 - Serviceable parts /material
 - Unserviceable
 - Unsalvageable components (see CAR 145.59(g))
 - Quarantine



- Batch number
- Scrap (etc.)

Issue of components, standard parts and materials, to the maintenance process (control, identification, batch segregation etc.) The storage condition and the storage limitations must be based upon manufacturer's recommendations.

2.4. Acceptance of Tools and Equipment

This chapter must describe the procedures for the acceptance of new, maintained, modified, calibrated tools/ equipment received and also the lent/ hired tooling.



Tools and equipment acceptance procedure

- Sources
- Conformity with company requirements (e.g. certification, proof of origin...)
- Records

Incoming inspection for tools

- Required documentation
- Compliance with order / condition
- "Quarantine" procedure
- Internal identification
- Verification of necessary control / calibration

2.5 Calibration of Tools and Equipment

This chapter shall refer to CAR 145.109(b) and AMC 145.109(b). It must describe all the procedures related to the controls, revisions, modifications, servicing, checking and calibrations of the tools/ equipment:



Inspection, servicing and calibration programme / equipment and calibrated tool register.



Establishment of inspection, servicing and calibration time periods and frequencies.



Person/ department responsible for the calibration programme, the register, the

follow-up, time period and frequencies (link between departments if necessary).



Identification of servicing / calibration due dates.





Management of personal or loaned calibrated tools

2.6 Use of Tooling and Equipment by Staff Including Alternative Tooling

This chapter refers to CAR 145.109(a) (b) and AMC 145.109(a) (b). It must describe all management procedures for tooling, distribution and return of the tooling after use: Alternative tooling is where the approved maintenance data specifies a particular tool or equipment, but the organisation wishes to use an alternative piece of tooling or equipment. This is only allowable if the organisation has in its MOE a procedure approved by the CAA-B that determines any alternative tooling or equipment provides for its equivalence regarding safety, usability and the standards required to be achieved. The procedure must require the Quality Manager to approve the use of the alternative tool or equipment before its use and a register of such tooling and its assessment is retained.

- Distribution of tools
 - record of user
 - location of use
 - Verification of A/C or component is clear of all tools after completion of maintenance
- Determining tool serviceability prior to issue
- Training and control of personnel in the use of specialist tools and equipment (records of training).
- Use and control of personal tools and equipment.
- Control of company tools and equipment loaned to persons
- Control of alternative tools
 - Demonstration of equivalence between design/manufacturing data of alternative tools and the data/features of the tools recommended in the maintenance data of the manufacturers/TC Holder
 - In-house identification rule of alternative tools (PN, SN)
 - Alternative tools validation process
 - Register of alternative tools /tagging/relation between the references of origin tools and alternative tools.
 - Treatment of possible changes of maintenance data according to the new references of alternative tooling (modifications limited to the references of the tooling to be used and/or adaptation of maintenance data regarding alternative tooling)

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- Use/storage/maintenance manuals according to the need
- In-house approval of each alternative tooling before servicing
- Storage of the records of alternative tooling.

2.7 **Cleanliness Standards of Maintenance Facilities**

Organisation of the cleaning of the facilities

- "Foreign Object" exclusion programme
- Cleaning programme
- Individual responsibilities
- Timescales
- Waste material disposal
- Special procedure for some facilities (painting, white room, parts cleaning)
- Segregation of facilities to prevent cross contamination

2.8 Maintenance Instructions and Relationship to Aircraft Manufacturer's Instructions including Updating and Availability to Staff

This chapter shall describe the management of all the technical documentation in use within the Organisation. It shall be structured to clearly identify the various types of documentation in use (both of external and/or internal origin), to be controlled by the organisation in order to perform the intended scope of work. The documentation may be divided in two main groups:

2.8.1 Maintenance Data Coming from External Sources

This paragraph needs to identify the applicable Maintenance data that is used and coming from external sources such as TCH, STC holders, the CAA-B etc.; If information is sourced through the internet then this system must be described.



Control of Information

- Technical library •
- Subscriptions control •
- Information held and required regarding the approved scope of work
- Issue / amendment control



Technical Information Amendment Procedures

- Manuals
- Service Information (AD SB SIL, etc.)
- Distribution and access to the staff
- Control of Customer Supplied Maintenance Data

2.8.2 Documentation/Maintenance Instructions Issued by the Maintenance Organisation

This chapter needs to identify and describe the management of the documentation issued by the maintenance organisation itself, as for example:

] Modification of maintenance instructions by the organisation as defined in CAR 145.111(d);

Maintenance instructions issued in conformity to approved data as per 145.111(d) to facilitate/customise the maintenance (e.g. work card/work sheet, engineering orders, technical specifications, etc.) as applicable;



Documentation issued for internal information purposes (e.g. quality information bulletins, quality alerts, occurrence investigation reports, etc.) as applicable;

Control of information;

- Technical Library
- Information held / require regarding the approved scope of work
- Issue / amendment control
- Incorporation of best practice and human factors principles

Awareness of Technical Publications, Instructions and Service Information by the staff.

2.9 Repair Procedure

2.9.1 Repairs

This chapter is intended to describe how the organisation is performing repairs on aircraft/engines. It must address repairs according to already available approved maintenance data and how it is managing the repairs not described in the manufacturers' or Type Certificate Holder's documentation, and those repairs which are not included in the manufacturer's or TC Holder's documentation.

It must be noted that a certificate of release to service cannot be signed for repairs that require CAA-B approval until the repair has been approved.



CAR AIR 1.103(b) requires a CAR 145 approved maintenance organisation to not certify an aircraft for release to service after the embodiment of a major design change or a major repair unless that design change or repair has been approved in accordance with CAR 21, Chapter 3. Such repairs must be first approved by the CAA-B.

CAR 145.111(c) requires that the organisation establishes a procedure to ensure that appropriate assessment is undertaken in the case of damage and that only approved repair data is used.

CAR AIR 1.103(b) requires a CAR 145 approved maintenance organisation to not certify an aircraft for release to service after the embodiment of a design change or a repair unless that design change or repair has been approved in accordance with CAR 21, Chapter 3. Such repairs must be first approved by the CAA-B.

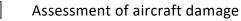
CAR 145.117(a) requires the organisation to provide a copy of all supporting documentation and any approved repair or modification data used together with the associated certificate of release to service.

Repairs according to already available approved maintenance data

- Repairs In accordance with AMM, SRM, CMM etc.
- Repairs already approved by the CAA-B.
- Repairs already approved by the TC Holder
- Internal process in use and forms to manage the repairs

Repairs requiring a new approval (not already included in the available approved maintenance data)

- Sources of repair approval
- Acceptance of Minor/major repairs approvals
- Work order
- internal process in use and forms to manage the repairs
- Maintenance instruction (job cards,..)



2.10 Aircraft Maintenance Programme Compliance

The contents of the Maintenance Programme remain the responsibility of the operator but to comply with the Maintenance Programme it often requires an interface with the maintenance organisation. For example, the required tasks sometimes require the completion of forms and feedback to the TC Holder and the Maintenance Programme may require testing of a component, but the report then should be reviewed to determine whether the condition is



satisfactory. This chapter therefore should describe the interface the maintenance organisation has with the operator on complying with the contents of the maintenance programme.



Maintenance programme variations



Corrosion control programme reporting



SSI reporting Reliability reporting

2.11 Airworthiness Directive Procedure

The follow up and control of airworthiness directives is the responsibility of the owner/operator who must request the accomplishment on the work order sent to the maintenance organisation. The maintenance organisation is then responsible to embody the ADs which have been ordered.

Only the AD related activities which concern the maintenance organisation tasks should be described in the MOE, with reference to the following points.

Access to relevant ADs

Information supplied to the operator after the AD has been accomplished

2.12 Optional Modification Procedure

This chapter shall refer to the modifications to be embodied on the aircraft/components/engines described in the manufacturers' documents (e.g. Service Bulletins) and the modifications not defined in manufacturers' or Type Certificate Holders documents.

CAR AIR 1.103(b) requires a CAR 145 approved maintenance organisation to not certify an aircraft for release to service after the embodiment of a design change or a repair unless that design change or repair has been approved in accordance with CAR 21, Chapter 3. Such modifications must be first approved by the CAA-B.



Work orders



Responsibility for gaining CAA-B approval if required

2.13 Maintenance Documentation in use and its Completion

This chapter shall refer to the creation of a standard work file and how to complete the work documents/ work cards making up these files. It is recommended to structure this chapter in three separate paragraphs as indicated below.



2.13.1 Maintenance Documentation in Use

This procedure shall identify all the internal documents used for recording maintenance and making up the complete work package.

List of maintenance documents which build up a standard work package (e.g. front page with General information, list of tasks required, work cards, associated work orders, expected CRS...)



Assembly of work packages for issue to maintenance activity Worksheets for non-routine task

Assembly of completed work package for certification

Control and use of customer supplied work card/worksheets

2.13.2 Completion of Maintenance Documentation

This procedure shall describe the completion of each of the documents identified in the previous paragraphs. This may be done by reference to MOE chapter 6.1 where the related sample document is included together with its related filling instructions. This procedure shall detail:

Process of declaring a task not applicable including conditional tasks

Process of recording materials/parts replaced together with the related traceability to the accompanying documents



Record and management of additional works.

Record and management of deferred items.



Worksheet / work card completion and maintenance / independent inspection signoff

Use of personal stamps (if applicable)

The procedure shall clearly indicate when a task is to be considered signed-off, i.e. completed, and by which mean (e.g. use of personal stamp, use of signature, combination of stamp plus signature, etc.).

2.14 Technical Records Control

This chapter must describe the procedures to comply with CAR 145.117

System for control, storage conditions (fire extinguisher system, fire detection, etc.) and retrieval of records (paper or computer based)



Control of access to records (paper and / or computer based records)



Provision of records to operator (copy or original Work pack/, Tech Log Book, TLB, CRS)



Retention of records

- Periods
- Methods and security

[All records to be in the English language.]

2.15 Rectification of Defects

The aircraft operator is responsible for ensuring that all required maintenance has been carried out before flight and therefore the operator must be informed in the case where full compliance with cannot be achieved. If the operator agrees to the deferment of full compliance with the rectification of defects, then the certificate of release to service may be issued subject to details of the deferment, including the operator's authority, being endorsed on the certificate. See paragraph 2.16

2.16 Release to Service Procedure

The procedure should draw attention to the fact that CAR 145.115(a) does not normally permit the issue of a Certificate of Release to Service in the case of non-compliance and should state what action the maintenance staff should take to bring the matter to the attention of the relevant department or person responsible for technical co-ordination with the aircraft operator so that the issue may be discussed and resolved with the aircraft operator. In addition, the appropriate person(s) as specified in CAR 145.105(b) should be kept informed in writing of such possible non-compliance situations and this should be included in the procedure.

- The procedure to describe what conditions must be satisfied before a CRS can be certified. (See the notes in MOE 2.9.1, 2.12 regarding a CRS following a repair or modification that prohibits a CRS unless they are previously accepted or approved by the CAA-B).
 - Definition of the CRS statement (CAR AIR 1 Chapter 3)
 - Action in the case of non-compliance
 - Minimum information to be contained in the certificate of release to service:
 - Basic details of the maintenance carried out (by reference to the maintenance data and related revision status, plus any eventually associated work package or job card as applicable to the product or component being maintained), and;
 - The date such maintenance was completed, and;

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The location where the maintenance was completed

The identity of the approved maintenance organisation, including the CAR 145 approval reference of the maintenance organisation, and;





Where applicable, the identification stamp by certifying staff



The procedure to allow for temporary fitment of a component in accordance with CAR 145.115(c).

2.17 Records for the Operator

This chapter will describe the content and procedures for retaining any records on behalf of the operator.



Contracted record keeping for the operator

Arrangements and procedure for retaining any operator's maintenance records

2.18 Reporting of Defects to the CAA-B/Operator/Manufacturer

This procedure must describe the reporting procedure to the CAA-B, the state of registry, and the organisation responsible for the design of the aircraft or component and where applicable the customer operator. Any condition of the aircraft or component identified by the organisation that has resulted or may result in unsafe condition that hazards seriously the flight safety shall be reported. CAP 21 contains further information, details and types of reportable occurrences. The reporting system must meet CAR 145.119 and AMC 145.119(a).



Completion of Form GEN 01 or an in-house company reporting form

Procedure for reporting to the CAA-B, state of registration, operator and the organisation responsible for the produce or appliance.





Investigation procedure

Persons in the company who must report occurrences

2.19 Return of Defective Aircraft Components to Stores



Labelling and identification of defective/unserviceable components

Serviceable aircraft components found "defective" upon installation (e.g. involvement of quality system for investigation, possible need to report the occurrence as per MOE 2.18)



Handling and movement of components (link between involved departments)



Storage of "defective" components

2.20 Defective Components to Outside Contractors

This chapter shall refer to the process of sending components to outside contractors for repair or modification.



Dispatch of components for repair / overhaul / calibration

Identification of required work



Return of the serviceable component after maintenance at the contractor/subcontractor facility

Control of dispatch, location and return

Return of loan parts

Management of the packing and transportation including those requiring special packing and transportation

2.21 Control of Computer Maintenance Records System

This chapter shall refer to any computer systems used to manage and/or record information regarding the maintenance tasks carried out.



Description of the computer records system in use and related objectives (e.g. AMOS, CAMP to track on-going maintenance in the hangar, etc.)



Information retrieval, display and printing



Back-up systems (frequency, means, and delay) and second site storage (frequency, means and delay)

Security and safeguards to unauthorised access and changes

2.22 Control of Man-Hour Planning versus Scheduled Maintenance Work



Hangar Visit Plan Versus Man-Hour Plan

The "hangar visit plan" shall be made available to demonstrate sufficiency of hangar space to carry out planned maintenance that requires to be performed in a hangar. The relation between the hangar visit plan and the man-hour plan shall be described. The hangar visit plan shall also include other activities not just Bahamian registered aircraft.



Description of the maintenance planning system taking into account

• Human performance limitations



- Complexity of work
- Availability of mechanics
- Availability of certifying staff of the correct disciplines
- Organising of shifts
- Updating the maintenance plan

2.23 Control of Critical Tasks (Independent Inspections)

Ref CAR AIR 1.090 Independent Inspections

This chapter is intended to establish a procedure to detect and rectify maintenance errors if not properly performed and comply with CAR AIR 1.090



Procedure for the performance of Independent Inspections

List of those tasks requiring an Independent Inspection to include:

- (1) an engine control system; or
- (2) a flight control system; or
- (3) a vital point; or
- (4) any task identified in the aircraft maintenance programme requiring such inspections unless an independent maintenance inspection has been performed.

Procedure to demonstrate that the signatories have been trained and have gained experience on the specific control systems being inspected. It is not acceptable for the certifying staff signing the release to show the person performing the independent inspection how to perform the inspection at the time the work is completed.

Procedure for entering in the aircraft logbook or other maintenance record required by CAR AIR 1.055(b):

- (1) a statement that indicates that the disturbed aircraft control system or critical task performed is in compliance with the approved maintenance data including, where appropriate, safety locking and the system has full and free movement and operates in the correct sense; and:
- (2) beside that statement:
 - (i) their signature; and



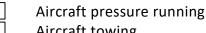
- (ii) their authorisation number; and
- (iii) the date and time of entry.

2.24 Reference to Specific Maintenance Procedures

Procedure for the maintenance of any aircraft for which it is approved at any location subject to the need for such maintenance arising either from the unserviceability of the aircraft or from the necessity of supporting occasional line maintenance (*Ref CAR* 145.125(a)(3))



Engine running



Aircraft towing







] Scrapping of parts

2.25 This Chapter is not used

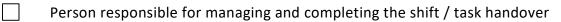
2.26 Shift / Task Handover Procedures



Aims and objectives of the shift handover



Recording of shift/task handover



2.27 Procedures for Notification of Maintenance Data Inaccuracies and Ambiguities to the Type Certificate Holder

(Ref CAR 145.111(b) and AMC 145.111(b))



Definition of maintenance data ambiguities



Method of internal reporting of maintenance data ambiguities and inaccuracies



Method of reporting maintenance data ambiguities and inaccuracies to the authors of the data.



Feedback to staff and implementation of corrections

Impact of the data ambiguity or inaccuracies on the on-going maintenance



The authors are:

- Aircraft or component design organisation (AMM, SB, SRM, CMM etc.)
- The CAA-B
- The CAR 145 organisation in the case of organisation generated job cards
- The customers in the case of job cards produced and provided by the customers

2.28 Production Planning Procedures

- Analysis of the work order to ensure the requested maintenance is within the approved scope of work.
 - Determining whether the job cards provided by the customer will be used or a work package will be developed and prepared by the organisation.
- Control of the availability and up to date maintenance data
 - Procedure for establishing all necessary resources are available before commencement of the work (e.g. manpower with the required authorisations and competence, staff, facilities, tooling, equipment, parts, documentation)
- Procedure for outsourcing contractors if necessary
- Consideration of human performance limitations when planning the work
- Planning of critical tasks and independent inspections
 - Obtaining the operators up to date Maintenance Control Manual/Continuing Airworthiness Management Exposition as applicable, to enable the planned work to comply with its contents and requirements and to ensure that it is available to all personnel as required by CAR 145.57.



PART L2 – ADDITIONAL LINE MAINTENANCE PROCEDURES

The MOE Part L2 is intended to provide for any additional procedures that are applicable and specific for Line Maintenance and not covered in the MOE Part 2. Where it is covered in the MOE Part 2 no further details are required and a direct reference to the MOE Part 2 chapter may be used in this Part L2

L2.1 Line Maintenance Control of Aircraft Components, Tools, Equipment etc.

	Component, material acceptance (required acceptable documentation, condition, "Quarantine" procedure)		
	Procedures to maintain satisfactory storage conditions		
	System for control of shelf-life and modification standard		
	Tagging / labelling system (e.g. serviceable, unserviceable, scrap, quarantine)		
	Release of components to be installed		
	Tools and test equipment, servicing and calibration programme / equipment register		
	Identification of servicing / calibration due dates on tooling and equipment		
Line Maintenance Procedure Relating to Servicing			
	Technical and maintenance documentation management (control and amendment)		
	Company Technical Procedures / Instructions management		
	Fuel supply quality monitoring (bulk storage / aircraft re-fuelling)		
	Ground de-icing (procedures / monitoring of sub-contractors)		
	Maintenance of ground support equipment		
	Monitoring of sub-contracted ground handling and servicing		
Line Maintenance Control of Defects and Repetitive Defects			
	Reportable defects		
	Rules for deferring (periods - review - permitted personnel - conformity with MEL /CDL provisions)		

Awareness of deferred defects carried by aircraft – (monitoring of repetitive defects - Communication with Main Base

L2.3

L2.2





Analysis of technical log (repetitive defects – crew complaints - Analysis and transfer of cabin log items if applicable)

Coordination with the operator

L2.4 Line Procedure for Completion of the Technical Log

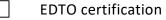
This chapter must contain the additional procedures of management/completion of the Technical Log(s) in use. It must also cover the procedures for EDTO release if applicable. These procedures must be associated to the MOE chapters 2.13 and 2.16.

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Technical Log system Taking into account the operator's own procedures Completion of Sector Record Page Distribution of copies

Training by the customer operator's procedures and maintenance record completion (e.g. logbooks)

Certification of maintenance including CRS



Retention of records by the organisation and those supplied to the operator Periods retained by the organisation Method and security of records by the organisation

Maintenance Independent Inspections

L2.5 Line Procedure for pooled Parts and Loan Parts

This chapter must describe the additional management procedures for pooled or loaned parts specific to the line maintenance activity. These procedures must be associated to chapters 2.2, 2.3, 2.19 and 2.20 of the MOE.



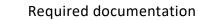
Verification of approved sources of parts (sources, conformity with company requirements, Modification Standard and AD compliance, records etc.)



Compliance with loan and contract requirements

- Tracking and control
- Required documentation
- Processing removed loan parts for return to lessor/loaner

L2.6 Line Procedure for Return of Defective Parts Removed from the Aircraft



Service records



Processing of advice of the removal (Work Order) and dispatch to technical recordsL2.7 Line Procedure Control of Critical Tasks

This chapter is the equivalent of the chapter 2.23 of the MOE but would describe any differences for Line Maintenance activities



Line maintenance procedure for control of critical tasks



PART 3 – QUALITY SYSTEM PROCEDURES

3.1 Quality Audit of Organisation Procedures

This chapter must explain how the audit of internal procedures are organised and managed in accordance with. CAR.145.121 and the associated AMC. Particularly, this chapter shall describe how the requirements for system/procedure audit are complied with and the methodology of the audit. Small organisation may choose to subcontract the audits to another organisation or an outside person with satisfactory technical knowledge and satisfactory audit experience if acceptable to the CAA-B (link to chapter 3.6).

Definition	of the	Quality	System

- Independence of the Quality auditors
- Access to the Accountable Manager
- Composition and functions of the management of the quality group
- Definition of:

- Independent audit
- Product sample check
- Product Line
- Random audit
- Finding classification
 - Procedures to manage the Findings and related required closure dates

Audit programme

- Audit plan.
- Audit planning.
- Use of Independent and contracted auditors.
- Training and competence assessment of auditors.
- Audit of contracted organisations, sub-contractors, suppliers as applicable.
- Scheduling of planned audits and random audits during maintenance.
- Internal approval of the audit programme/plan and management of changes to the programme/plan.



- Audit notification to auditees.
- Audit reports (contents, documents used, writer, closure time for rectification.
- Quality feedback system description.

3.2 Quality Audit of Aircraft (and/or Equipment)

- Definition of a "Product" Audit (Ref AMC 145.121(c)(6)
 - "Product" audit Programme
 - Product samples for each line of product
 - Dates and timescales
- Records of "Product" audit reports
 - Duration (at least 24 months from the date of the audit or closure, whichever occurs later)
 - Type of documentation used (e.g. notification, audit reports, checklists, audit programme)

3.3 Quality Audit Remedial Action Procedure



Description of the quality audit feedback system

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- Corrective action and timescales
- Corrective action planning and follow up (e.g. notified, answered, corrective action accepted, rejected, open/closed.
- The corrective action plan shall be designed in a way which allows for identifying and recording the Finding, the root cause, the relevant immediate and long-term preventative action with the appropriate time scale.

Management of Finding Due Dates

- Monitoring responsibilities
- Extension of due dates
- Procedure for managing the Finding(s) when the corrective action deadline has to be postponed or exceeded.



Management Review of the Quality System

• Frequency of the regular meetings between the Accountable Manager and staff to check progress on corrective actions and to review the overall performance of the Quality system (ref AMC 145.121(c) 16), including retention of meeting minutes.

3.4 Certifying Staff Qualification, Training and Competence Procedures

This chapter must explain how certifying staff are selected, qualified, experienced and trained in order to be authorised. Refer to CAR 145.107, AMC 145.107, CAR 145.19 and AMC 145.19. The procedures must include how compliance with all of CAR 145.107 and AMC 145.107 is achieved



Acceptable Aircraft Engineer/Technician's Licence as a basis for an Authorisation

Training

• Aircraft type and associated examination pass/fail criteria

Minimum Aircraft Type Experience

- Minimum practical aircraft maintenance experience in order to be considered for an Authorisation
- Minimum practical maintenance experience on the particular aircraft type in order to be considered for an Authorisation for the aircraft type.

Competence	Assessment
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- Relevant knowledge, skills and experience in the product type and configuration to be Authorised
- MOE and associated organisation procedures and operator's procedures (e.g. handling and identification of components, MEL use, Technical Log use, Independent Inspections.
- Appropriate attitude to safety and observance to procedures
- Training on tasks that require specific training and experience. Refer to AMC 145.107(a) 2. for examples
- Procedure for ensuring that all aircraft certifying staff are involved in at least 6 months of actual aircraft maintenance experience in any 2 year period.

Authorisation duration/validity

Renewing an Authorisation



Certifying Staff Continuation Training (*Refer to CAR 145.107(c)*)

Programme established



Suspending or revoking an Authorisation

3.5 Certifying Staff Records

The records for certifying staff must meet that in CAR 145.107(h) and AMC 145.107(h). A copy of the Authorisation Document is required to be included as CAR 145.107 (i) requires it to be acceptable to the CAA-B.



Description of the certifying staff record system

A copy of the Authorisation Document used, including a description of any codes or abbreviations on the Document

3.6 Quality Audit Personnel

This chapter must describe how the Quality system personnel are qualified, competent and managed

Required experience, knowledge, qualifications and training required to be nominated to the CAA-B by the organisation to be the Quality Manager.

Required experience and competence of audit personnel (e.g. professional background and minimum number of audits performed under supervision before being authorised to perform audits unsupervised

Required training including Quality Systems, audit techniques, regulations, MOE, associated organisation procedures and continuation training

Specific experience and/or technical training in order to be authorised to audit specific areas or to cover specific audit functions, as applicable to the organisation (e.g. audit of NDT areas, Welding, Lead auditor, etc.)

Scope of authorisation for auditors (e.g. Product auditor, System/procedures auditor, NDT auditor etc.)

Retention of Auditor's records

Documents to be retained

Determination that the organisation has sufficient quality personnel to undertake the required workload



If quality personnel are not full-time employed, the number of man-hours per month should be stated.

3.7 Qualifying Inspectors

This chapter should describe the qualifications and authorisation of Inspectors who undertake inspection tasks that are not related to a CRS, e.g. Stores Inspection, Technical Records Inspection, Ground Equipment Inspection, Library control but require having a level of knowledge, experience, qualifications, training etc. in order to be considered competent

3.8 Qualifying Mechanics

If applicable this chapter refers to the procedure for the qualifying of mechanics to perform and certify tasks in accordance with CAR 145.107(f), CAR 145.105(h) and AMC 145.105(h). If mechanics are not being qualified and task trained to perform and certify limited maintenance this chapter should be marked "Not Applicable".

Procedure for Task Training
Examination procedure
Minimum experience to be considered for an Authorisation
Minimum age to be considered for an Authorisation
Knowledge of organisation procedures
Competence assessment
Issuing of an Authorisation
Renewing an Authorisation
List of tasks that can be Authorised
Suspending or revoking an Authorisation
Records to be retained including the period of retention

3.9 Aircraft or Aircraft Component Maintenance Task Exemption Process Control

This chapter is applicable to those aircraft operated commercially under CAR OPS 1 or CAR OPS 3 and must describe the procedures of the organisation regarding the exceptional times when a variation to the maintenance programme is being sought. The contract between the AOC Holder should specify what support the maintenance organisation may provide to the operator in order to substantiate the variation request.

3.10 Concession Control for Deviation from the Organisations' Procedures



This chapter must describe the procedures used by the organisation to deviate from the approved MOE procedures. Deviation from procedures that are required to comply with a CAR requirement cannot be deviated from without the agreement of the CAA-B, but some procedures are for administrative purposes. For example, the MOE may say that a certain form must be used but a new form has been written but the MOE not yet updated.



Concession criteria

Concession management procedure

System of internal approval of the deviation.

3.11 Qualification Procedure for Specialised Activities such as NDT, Welding etc.

This chapter should describe the procedures to qualify, authorise, and control competence of those persons involved in specialised activities such as NDT, welding, painting, aircraft weighing etc.

3.11.1 NDT personnel

NDT staff

- List of NDT testing personnel
- Levels of qualification and authorisation
- Role and privileges of NDT staff

Experience & qualifications

- Criteria regarding experience, training and skills
- Experience required by NDT method for each level of authorisation

Training

- Basic training for each level of authorisation
- Training on the NDT procedures of the organisation
- Examination
 - Procedure of skills assessment) practical assessment and/or examination related to the job task card(s)
 - General examination on the fundamentals of the NDT methods
 - Specific examination by NDT methods



- Practical examination by level of authorisation
- Medical examination
- Eyesight testing
- Continuation training and testing

Authorisation issue, renewal, suspension and revocation procedure

- Retention of NDT staff records
 - Duration and location
 - Documents to be retained

3.11.2 Other specialised activities (e.g. welders, painters etc.)



Similar topics as those relating to the NDT staff shall be described for each category as applicable.

3.12 Human Factors Training Procedure

CAR 145.105(f) and AMC 145.105(f) describes the requirement for the organisation's staff to have initial human factors training and should be referred to.

Aims and objectives



Categories of staff to be trained





Duration of training

Requirements for trainers to conduct the training

Training record

- Duration / location
- Type of documents retained

3.13 Competence Assessment of Personnel

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CAR 145.105(f) requires the competence of all personnel involved in maintenance, management, and quality audits to be established and controlled in accordance with a procedure approved by the CAA-B. Additional guidance is contained in AMC 145.105(f)

Personnel who are to be assessed as required in accordance with AMC 145.105(f)

Management of the competence assessment

- Assessment procedure for staff required to be assessed.
- Competence assessment for certifying staff's initial, extension and renewal of an authorisation.
- Person responsible for the assessment process
- When the assessment takes place
- Verification of qualifications, training, experience etc.
- Actions to be taken when the person is assessed as not competent

Assessment records

- Duration / location of the records
- Type of documents retained
- Person responsible for retaining the records



PART 4 – CONTRACTING OPERATORS

This MOE Part is to be considered applicable only when the Organisation is holding a maintenance contract for Bahamian registered aircraft. It is not applicable to ad hoc maintenance that is performed by a work order with an operator. It is recommended to have a separate procedure for each customer operator which may be produced in the form of a Joint Procedures Manual (JPM).

4.1 Contracting Operators

This chapter must list those operators for whom maintenance is provided with details of the aircraft types and scope of work undertaken with any limitations.

4.2 Operator Procedures and Paperwork

This chapter must describe for each contracting operator the procedures, documents, exchange of information, work planning etc. used between the organisation and the operator.



Training by the operator on their procedures, completion of their paperwork etc.

4.3 Operator Record Completion

This chapter must describe for each operator how the organisation:



Completes the operator's log books



Keeps the operator's records



Retains the operator's records (if applicable)



Communicates with the operator



PART 5 – SAFETY MANAGEMENT SYSTEM

Whilst the MOE must be approved by the CAA-B, the Safety Management System is required to be accepted by the CAA-B. A fundamental part of the organisations' safety management system is the SMS Manual that describes the means, methods and practices by which they undertake safety management and compliance with CAR 145 Chapter 2.

This Part should identify the SMS Manual and the means by which it is amended and submitted to the CAA-B for their acceptance.

Whilst the Safety Manager is responsible for the managing and implementation of the SMS the Accountable Manager is ultimately responsible for it.

5.1 SMS Manual Document reference

Note: This should not include the issue or revision status of the manual.

5.2 SMS Manual Amendment

- Person responsible for amending the SMS Manual and any associated documents.
- Internal vetting and approval process for amendments.
 - Person responsible for submitting amendments to the CAA-B and coordinating their acceptance.
 - The definition of what constitutes a new issue to the SMS Manual and what constitutes a revision to the SMS Manual



PART 6 – APPENDICES

6.1 Sample of Documents

This chapter must list all the forms and documents used by the organisation which should have a unique reference number allocated to them and identified with a revision status to allow for traceability of changes.

Examples:

- Form Register (list of all the forms used in the organisation including their revision status
- Parts Register Parts Batch No. Register Library Register **Tool Register** Approved Alternate Tool Register Calibration Record and Control **Concession from Company Procedures Competence Assessment forms** Maintenance Check Control Sheet Personnel Training Record Certifying Staff Authorisation **Stores Register** Shelf Life Control **Quality Finding Report Quality Corrective Action** CAR 145 Checklists
 - Tool Identification Tag
- Maintenance Task Card





Maintenance defect Card Unserviceable Label

] Serviceable Label

Stores Quarantine Label

Certificate of Release to Service after Hangar Maintenance

Request for acceptance of the SMS Manual

6.2 List of Contracted CAR OPS Operators

This chapter should list those CAR OPS operators that the organisation is contracted to provide maintenance support to.

6.3 List of Sub-Contractor Organisations (*Ref CAR 145.125(b*)



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