



User Guide for Maintenance Organization Exposition

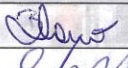


UG (DCA) 145.A.70

Revision 0 date 05-MAY-2025

MCAR Part 145 approvals

User Guide for Maintenance Organisation Exposition

UG (DCA) 145.A.70

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0.2. Definitions and Abbreviations.

Abbreviations	
AMC	ACCEPTABLE MEANS OF COMPLIANCE
AMO	APPROVED MAINTENANCE ORGANISATION
AMTO	APPROVED MAINTENANCE TRAINING ORGANISATION
AOG	AIRCRAFT ON GROUND
CAO	COMBINED AIRWORTHINESS ORGANISATION
CAP	CORRECTIVE ACTION PLAN
C/S	CERTIFYING STAFF
CC/S	COMPONENT CERTIFYING STAFF
DCA	DEPARTMENT OF CIVIL AVIATION MAURITIUS (COMPETENT AUTHORITY)
GM	GUIDANCE MATERIAL
IORS	INTERNAL OCCURENCE REPORTING SYSTEM
MOC	MAINTENANCE OVERSIGHT COORDINATOR
MOE	MAINTENANCE ORGANISATION EXPOSITION
MOR	MANDATORY OCCURRENCE REPORTING
OEM	ORIGINAL EQUIPMENT MANUFACTURER
OMS	OVERSIGHT MANAGEMENT SOFTWARE
PPB	PRINCIPAL PLACE OF BUSINESS
S/S	SUPPORT STAFF
SMS	SAFETY MANAGEMENT SYSTEM
STCH	SUPPLEMENTAL TYPE CERTIFICATE HOLDER
TCH	TYPE CERTIFICATE HOLDER
WH	WORKING HOURS



0.3. Scope and Applicability.

In accordance with MCAR 145.1, DCA Mauritius is the Competent Authority for maintenance organisations having their principal place of business located in Mauritius, and is therefore responsible for the final approval of these maintenance organisations and for establishing procedures detailing how DCA Part-145 applications and approvals are managed.

This User Guide is applicable to MCAR Part-145 applicant (hereafter referred as maintenance organisations or AMO) having their principal place of business located in Mauritius.

The provisions of this User Guide are complementary to the requirements of MCAR Part-145 regulation “as amended” and does not supersede or replace the associated regulatory requirements.

0.4. Purpose.

This user guide is designed to be used by:

- maintenance organisations - To assist them in the production of their own MOE.
- Competent Authority - As a comparison document for MOEs submitted for approval.

0.5. Entry into force.

This User Guide is applicable in conjunction with entry in force of MCAR Part 145 issue 04 revision 00 dated APR-2025.

0.6. Associated Instructions.

DCA has developed associated instructions (user guides, Forms, templates and work instructions), that detail specific matters, which have to be considered as an integral part of this procedure.

Each time a cross reference is provided to another document or another chapter / paragraph of the same document, this reference is identified with grey text.

0.7. Communication.

All documents and correspondences between the maintenance organisation, and DCA shall be in the English language.

1. General Guidance

1.1. Preliminary Considerations.

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

- Part-145. This includes requirements of Part-M or Part-ML referred in Part-145 regulation, as applicable;

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

What must be done? Who should do it? When must 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, as long as all the applicable sections of the regulation are addressed and cross-referenced.

However, for standardization purposes, to facilitate the production of the MOE by the Maintenance Organisation and review by the assigned inspector, it is recommended to strictly adhere to the MOE structure, chapters/paragraph numbering and titles and expected content of this User Guide. The Maintenance Organisation should however customize the document to its own organisation and may also include additional paragraphs where necessary.

1.2. MOE serving multiple regulatory approvals

Part-145 AMC material states that: “Where an organisation uses a different format, for example, to allow the exposition to serve for more than one approval ...”

DCA acknowledges however, the need for industry to standardize as much as possible the organisation procedures in the cases where multiple regulatory approvals have to be managed. In this case, consideration may be given to accept “associated procedures” (see definition in par. 1.7 MOE Structure) serving more than one regulatory approval, provided that the following minimum requirements are met for each single “associated” procedure/list:

- the structure of the document has to comply with the criteria identified in par. 1.7.2 “MOE supplemented by associated procedures”;
- clear indication is provided of which part of the text is applicable to DCA. In this way, when DCA is issuing an approval for the related document, it is clearly identified that only the parts applicable to DCA are being approved. DCA is not responsible for information in the document which is identified as applicable to other regulatory approvals. When the organisation is not able to clearly indicate which part of the text is applicable to DCA, a stand-alone “associated procedure” shall be developed only for the DCA approval.

“EXAMPLE” Abstract of MOE associated procedure for control of unserviceable components

Procedure content	Regulatory approval applicability
<i>Unserviceable components are identified with unserviceable tag Nr. XXX</i>	<i>ALL</i>
<i>Information shall be stated in the tag on actions necessary to be taken, in-service times, maintenance status, preservation status, failures, defects or malfunctions reported or detected exposure to adverse environmental conditions, and if the component was installed on an aircraft involved in an accident or incident.</i>	<i>DCA</i>
<i>The tag shall be signed and dated by the authorized mechanic who has removed the component from aircraft</i>	<i>ALL</i>
<i>When working under Regulatory Approval YYY, the component shall also be labelled with yellow tag Nr. ZZZ</i>	<i>Regulatory Approval YYY</i>

1.3. Exposition Format and Language.

The MOE may be produced in hardcopy or electronic format;

- Hardcopy: DCA does recommend using white paper (format A4); The MOE is provided in a binder with section dividers. (recto/verso can be used)
- Electronic Format¹: The Exposition should be in Portable Document Format (PDF) but a printed copy is delivered to the overseeing authority to facilitate the document study.

¹ The organisation may use electronic data processing (EDP) for the publication of the MOE

The MOE, associated procedures and lists and other documents required to show compliance the DCA MCAR Part-145 requirements shall be available in the English language.

1.4. Terms in Use.

For the purpose of this procedure, 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 General, Part 2 Maintenance Procedures, Part 3 Management System procedures, etc.) as identified in the AMC1 145.A.70.(a);
- “MOE chapter” is used to identify each chapter within an MOE Part (e.g. MOE 1.2 Safety policy and objectives, MOE 3.2 Internal safety reporting and investigations, MOE 5.1 sample documents) as identified in the AMC1 145.A.70.(a);
- “MOE paragraph” is used to identify a paragraph within an MOE chapter (e.g. MOE 3.9.1 “Aircraft certifying staff”, MOE 3.9.2 “Components certifying staff”, etc.). At the paragraph level the numbering system is not pre-identified in the Part-145 regulation and it is left to the need of the organisation. Further division to sub-paragraphs may be also used.

1.5. MOE User Guide writing conventions

To facilitate the reading and understanding of this user guide, the following writing conventions are being used which applies to each MOE chapter:

Regulatory references

Reference to the applicable regulatory requirement and DCA Guidance material is identified after each MOE chapter/paragraph as necessary.

A cross-reference table between MOE chapters/paragraphs to the regulatory references is provided in the following paragraph 1.6 of this User Guide.

Expected content of the organisation MOE:

This user guide is developed in a “check list format” to facilitate compliance check of the minimum expected content of the organisation MOE. In particular the check boxes (☐) are indicating the “expected content” of each chapter/paragraph. The expected content is identified with normal font.

It has to be considered however, that this user guide applies to any maintenance organisation with any scope of approval, therefore it is the organisation responsibility to identify the “expected content” applicable to the organisation.

When an “MOE paragraph” is identified in this user guide, the same paragraphs structure is expected to be found in the organisation MOE.

Examples: when major examples are being made to better visualize the expected MOE content, the term “**EXAMPLE**” in bold capital letters will proceed the example made. In case of a minor example within a text, which is done only to clarify the meaning of the text, the example is contained in brackets and preceded by the abbreviated term “in example”, such as (e.g. text of the example, etc.).

Comments: comments and supporting information are inserted in “*italics*” font. They are not supposed to be themselves an expected content but only intended to provide additional clarifications.

1.6. Cross reference MCAR Part-145 versus MOE chapters

The expected content of each MOE chapter of this user guide has been established starting from the MCAR Part-145 requirements and the other MCAR guidance material according to the following cross reference table.

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GM1 145.A.200(a)(3).....	3.1		
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1.7. MOE Structure

The maintenance organisation shall follow one options identified in following paragraphs 1.7.1 or 1.7.2 when deciding the MOE structure which better fits its operations.

1.7.1. Single MOE document

The MOE is developed by the organisation as an unique and complete document containing all the information required to show compliance with applicable DCA regulation and all detailed procedures and lists customized by the maintenance organisation.

1.7.2. MOE supplemented by associated procedures/lists

Associated procedures/lists shall meet the same rules in terms of document structure as described for the MOE (refer to General Guidance of this User Guide (par. 1.7.4 and 1.7.5);

When the organisation is developing an MOE supplemented by associated procedures/lists, then:

- the MOE must contain at least the information required by 145.A.70(a)1 to 145.A.70(a)12 and 145.A.70(a)17 and a minimum regulatory compliance procedure in each chapter², and;
- “associated” procedures/lists as defined below:

Associated Procedure: means a procedure providing additional and customized details on how the organisation intends to comply with applicable requirements (an example is provided in previous paragraph 1.2 of this UG);

Associated List: means any of the list required by 145.A.70(a), when published separately from the MOE;

1.7.3. Work instructions

Work Instructions are intended to be those documents including detailed instructions for maintenance personnel on how to perform their duties on a daily basis. They could also include lists/forms which are not required by 145.A.70 (a), such as for example the list of tools service providers, list of internal auditors, template to list units stored in a certain location, templates listing staff on duty, etc.

Work instructions do not require DCA approval and are to be fully controlled by the maintenance organisation. The Compliance Monitoring function remains responsible to ensure any such document does not conflict with MOE or associated procedures/list.

“EXAMPLE” Abstract of work instruction related to control of unserviceable components

<i>Work instruction content</i>
<i>Unserviceable components shall be located by production staff in the shelf nr.1. On daily basis the storekeeper verifies the status of shelf nr.1 and updates the list of unserviceable units in the computerized system. In case the unserviceable tag or removal information is found missing, the storekeeper will proceed issuing an internal occurrence to highlight the non-compliance with maintenance procedures.</i>

In order to avoid confusion between MOE associated procedures/lists and work instructions, the following criteria is recommended:

- MOE procedures shall contain reference to MOE associated procedures/lists, which are listed in the MOE 1.11 (no reference should be given in the MOE to work instructions);
- MOE associated procedures/lists may refer to work instructions;
- Work instructions may refer to MOE and/or associated procedures lists.

² An MOE chapter only referring to an associated procedure is not acceptable.

1.7.4. Management Control of the MOE.

In order 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 new issue and/or revision number;
- A new issue and/or revision date;
- 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.).

In particular, depending on the complexity and need of the organisation, one of the two following possibilities is recommended:

1. MOE identified by both an Issue number and Revision number.

This option is intended to use two different numbering systems (Issue and Revision number).

In particular, each time the issue number is changed, the revision number will start again from “0”. The following table is given as an example:

“EXAMPLE”

Issue number	Issue date	Revision number	Revision date
1 (initial)	1/1/2012	0	1/1/2012
		1	17/2/2012
		2	25/3/2012
2	20/4/2012	0	20/4/2012
		1	10/5/2012
		2	15/6/2012

There may be various reasons to choose this option of double identification, such as for example to identify any major change of the organisation with a change of the issue number and each minor change by changing the revision number.

This solution will therefore require to identify the MOE with Issue number, Issue date, Revision number and Revision date.

2. MOE identified only by a revision (or issue) number.

This solution is less flexible than the previous one, because any change to the MOE will be identified only by a change in the revision (or issue) number.

The numbering of the revision (or issue) will start with “0” and increase at each revision. The following table is given as an example:

“EXAMPLE”

Revision (or issue) Nr.	Revision (or issue) date
0 (initial)	1/1/2012
1	17/2/2012
2	25/3/2012

This solution will therefore require to identify the MOE only with Revision (or issue) number and Revision (or Issue) date.

1.7.5. Exposition Pages 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 User Guide:

- the name of the organisation (official name as defined on the DCA Form 3 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 (e.g. 1-5);
- the page number;
- the name of the document "Maintenance Organisation Exposition";

The cover page of the volume shall specify:

- the title "Part-145 Maintenance Organisation Exposition";
- Unique identification number given to the MOE (e.g. AMONAME-DCA-DOC1).
A unique identification number is expected for each document which is part of the DCA approval (refer to MOE 1.11). It is particularly helpful when managing electronic approvals of documents.
- The name of the organisation (the official one defined on the DCA Form 3 approval certificate);
- The address, telephone, fax numbers and the generic e-mail address³ of the Principal Place of Business of the Organisation;
- The copy number from the distribution list;
- The approval reference of the PART-145 organisation;

³ The generic email address is aimed to be used even though people in charge leave the company. The address should remain independent from a person and therefore without personal name.

1.8. MOE Initial Approval Process.

1.8.1. First Submission of the “Draft” MOE.

Prior to submission of the ‘draft’ MOE to the competent authority for approval, the Accountable Manager must sign and date the statement in **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 their competent authority for approval.

1.8.2. Tracking Changes to the Initial Draft MOE.

Following the receipt of the first “draft” MOE, the competent authority 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 competent authority 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;
 - 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 competent authority in order to proceed further with the technical investigation process.

Important note: The same principle applies to the successive revisions of the MOE and also to the documents associated to the exposition such as procedures and lists subject to DCA approval.

2. MOE Structure and Content

PART 0 – INTRODUCTION

As a general guidance to be applied to the whole MOE document and associated procedures, the acceptable language to be used by the maintenance organisation is English.

0.1 Table of Contents.

AMC1 145.A.70(a); 145.A.70(a);

For standardization purposes, to facilitate the production of the MOE by the Part-145 maintenance organisation and review by the assigned inspector, it is recommended to strictly adhere to the MOE structure, chapters/paragraph numbering and titles of this User Guide. The maintenance organisation should however customize the document to suit their organisation and may also include additional paragraphs where necessary.

If necessary, the maintenance organisation may include additional paragraphs in Part-5. In such a case, each additional chapter must have a cross reference to the affected MOE chapter. For example:

5.6 Detailed layout of the facilities listed in MOE 1.8

5.7 Training programme referred in MOE 3.6

5.8 Audit Matrix reference MOE 3.8.1

The assigned inspector is referring to this user guide when reviewing the MOE for approval and a different structure will result in additional workload and time.

Where a Part/chapter/paragraph is not used it shall be identified in the Exposition as Not Applicable (e.g. this is particularly the case when the paragraph is not applicable to the scope of approval of the organisation)

0.2 List of Effective Page.

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” 1: *The example below is related to a MOE identified by both an Issue number and Revision number.*

Page nr.	Issue nr.	Revision nr.	Revision Date	Page nr.	Issue nr.	Revision nr.	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	1	0	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	PART 4			
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 Review by the Organisation:

reviewed by: (name & position)	date:
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MOE Approval ⁴ (to be only used in case of MOE change not requiring prior approval):

Approved by: (name, position and signature of the approving person)	date:
--	--------------

⁴ - In the case of MOE requiring prior approval by the competent authority, the MOE approval is given through a notification issued by DCA. The compliance monitoring function is responsible to ensure that only the approved MOE is made available to maintenance personnel .

- In the case of MOE change not requiring prior approval, the MOE approval is completed by the organisation entering the date of the MOE approval, the name, position and signature of the approving person.

“EXAMPLE” 2: the example below is related to a MOE identified only by a revision number

Page Number	Revision Date	Revision number	Page Number	Revision Date	Revision number
PART 0			121	01 January 07	Rev. 1
001	1 January 12	Rev. 2	122	01 January 07	Rev. 1
002	1 January 12	Rev. 2	PART 2		
003	1 January 12	Rev. 2	201	19 December 06	Rev. 0
004	1 January 12	Rev. 2	202	19 December 06	Rev. 0
005	1 January 12	Rev. 2	203	19 December 06	Rev. 0
006	1 January 12	Rev. 2	204	19 December 06	Rev. 0
007	1 January 12	Rev. 2	205	19 December 06	Rev. 0
008	1 January 12	Rev. 2	206	19 December 06	Rev. 0
009	1 January 12	Rev. 2	207	01 January 07	Rev. 1
PART 1			PART L2		
101	19 December 06	Rev. 0	L201	19 December 06	Rev. 0
102	19 December 06	Rev. 0	L202	19 December 06	Rev. 0
103	1 January 12	Rev. 2	L203	19 December 06	Rev. 0
104	01 January 07	Rev. 1	L204	19 December 06	Rev. 0
105	01 January 07	Rev. 1	PART 3		
106	19 December 06	Rev. 0	301	1 January 12	Rev. 2
107	01 January 07	Rev. 1	302	1 January 12	Rev. 2
108	01 January 07	Rev. 1	303	01 January 07	Rev. 1
109	1 January 12	Rev. 2	304	01 January 07	Rev. 1
110	01 January 07	Rev. 1	305	19 December 06	Rev. 0
111	19 December 06	Rev. 0	306	19 December 06	Rev. 0
112	01 January 07	Rev. 1	307	19 December 06	Rev. 0
113	19 December 06	Rev. 0	308	19 December 06	Rev. 0
114	19 December 06	Rev. 0	PART 4		
115	01 January 07	Rev. 1	401	1 January 12	Rev. 2
116	19 December 06	Rev. 0	402	1 January 12	Rev. 2
117	19 December 06	Rev. 0	403	1 January 12	Rev. 2
118	19 December 06	Rev. 0	PART 5		
119	19 December 06	Rev. 0	501	1 January 12	Rev. 2

MOE Revision 2 dated 01 January 12

MOE internal review by the organisation:

reviewed by: (name & position)	date:
---	--------------

MOE Approval ⁵*(to be only used in case of MOE change not requiring prior approval):

Approved by: (name, position and signature of the approving person)	date:
--	--------------

⁵ - In the case of MOE requiring prior approval by the competent authority, the MOE approval is given through a notification issued by DCA. The compliance monitoring function is responsible to ensure that only the approved MOE is made available to maintenance personnel .
- In the case of MOE change not requiring prior approval, the MOE approval is completed by the organisation entering the date of the MOE approval, the name, position and signature of the approving person.

“EXAMPLE” 3: the example below is related to a MOE identified only by a revision number and a revision date, all pages being re-issued each time the MOE is revised with the changes duly identified on each page.

Page Number	Revision Date	Revision	Page Number	Revision Date	Revision
Number	Revision	Number	Number		Number
PART 0			121	1 January 13	Rev. 5
001	1 January 13	Rev. 5	122	1 January 13	Rev. 5
002	1 January 13	Rev. 5	PART 2		
003	1 January 13	Rev. 5	201	1 January 13	Rev. 5
004	1 January 13	Rev. 5	202	1 January 13	Rev. 5
005	1 January 13	Rev. 5	203	1 January 13	Rev. 5
006	1 January 13	Rev. 5	204	1 January 13	Rev. 5
007	1 January 13	Rev. 5	205	1 January 13	Rev. 5
008	1 January 13	Rev. 5	206	1 January 13	Rev. 5
009	1 January 13	Rev. 5	207	1 January 13	Rev. 5
PART 1					
101	1 January 13	Rev. 5	L201	1 January 13	Rev. 5
102	1 January 13	Rev. 5	L202	1 January 13	Rev. 5
103	1 January 13	Rev. 5	L203	1 January 13	Rev. 5
104	1 January 13	Rev. 5	L204	1 January 13	Rev. 5
105	1 January 13	Rev. 5	PART 3		
106	1 January 13	Rev. 5	301	1 January 13	Rev. 5
107	1 January 13	Rev. 5	302	1 January 13	Rev. 5
108	1 January 13	Rev. 5	303	1 January 13	Rev. 5
109	1 January 13	Rev. 5	304	1 January 13	Rev. 5
110	1 January 13	Rev. 5	305	1 January 13	Rev. 5
111	1 January 13	Rev. 5	306	1 January 13	Rev. 5
112	1 January 13	Rev. 5	307	1 January 13	Rev. 5
113	1 January 13	Rev. 5	308	1 January 13	Rev. 5
114	1 January 13	Rev. 5	PART 4		
115	1 January 13	Rev. 5	401	1 January 13	Rev. 5
116	1 January 13	Rev. 5	402	1 January 13	Rev. 5
117	1 January 13	Rev. 5	403	1 January 13	Rev. 5
118	1 January 13	Rev. 5	PART 5		
119	1 January 13	Rev. 5	501	1 January 13	Rev. 5

MOE Revision 5 dated 01 January 13

MOE internal review by the organisation:

reviewed by: (name & position)	date:
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MOE Approval ^{6*} (to be only used in case of MOE change not requiring prior approval):

Approved by: (name, position and signature of the approving person)	date: 05 February 2013
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⁶ - In the case of MOE requiring prior approval by the competent authority, the MOE approval is given through a notification issued by DCA. The compliance monitoring function is responsible to ensure that only the approved MOE is made available to maintenance personnel .

- In the case of MOE change not requiring prior approval, the MOE approval is completed by the organisation entering the date of the MOE approval, the name, position and signature of the approving person.

0.3 List of Issues / Amendments Record of Revisions.

The record of revisions shall identify the MOE sections and the reason for change.

“EXAMPLE” 1: the example below is related to an MOE identified by both an Issue number and a Revision number.

Issue number	Issue date	Revision number	Revision date	Revision type	Reason for change
1	19/12/06	0	19/12/06	INITIAL	n/a
		1	01/01/07	minor	New procedure for cleaning
2	01/01/12	0	01/01/12	major	<ul style="list-style-type: none">MOE 1.3 Change of Compliance Monitoring ManagerMOE 1.9 Extension of the A1 scope of approval to add aircraft Boeing 787-8/9/10 (GENx)

“EXAMPLE” 2: the example below is related to an MOE identified only by a revision number .

Revision number	Revision Date	Revision Type	Reason for change
0	19 December 06	INITIAL	n/a
1	01 January 07	minor	New procedure for cleaning
2	01 January 12	major	<ul style="list-style-type: none">MOE 1.3 Change of Compliance Monitoring ManagerMOE 1.9 Extension of the A1 scope of approval to add aircraft Boeing 787-8/9/10 (GENx)

The issue and revision number shall be numeric (issue 3, rev 25). The use of alphabetic characters (issue A, rev BC) for the issue and revision is not acceptable due to limitations in the oversight management software used by DCA.

0.4 Distribution List.

“EXAMPLE”

MOE COPY NUMBER	MOE HOLDER	FORMAT
Copy No. 1	Accountable Manager	CD-ROM
Copy No. 2	Safety Manager	PAPER
Copy No. 3	Aircraft Maintenance Manager	CD-ROM
Copy No. 5	Workshop Maintenance Manager	CD-ROM
Copy No. 5	Compliance Monitoring Manager	PAPER
Copy No. 6	DCA	PAPER
Copy No. 7	Reserved	
Copy No. 8	Reserved	

0.5 Definitions and Abbreviations

This chapter is intended to list the definitions and abbreviations/acronyms in use within the MOE

PART 1 – GENERAL

1.1 Statement by the Accountable Manager.

145.A.70(a)1, GM1 145.A.70(a), 145.A.90(a);

This exposition and any associated referenced manuals define the organisation and procedures upon which the Part-145 approval certificate is issued by DCA.

These procedures are endorsed by the undersigned and must be complied with, as applicable, when contracts or work orders are being progressed under the organisation approval certificate. These procedures do not apply to aircraft which are outside the remit of the Basic Regulation.

These procedures do not override the necessity of complying with any new or amended regulation published from time to time where these new or amended regulations are in conflict with these procedures.

It is understood that the approval of the organisation is based on the continuous compliance of the organisation with Part-145, Part-M and Part-ML, as applicable, and with the organisation's procedures described in this exposition. DCA is entitled to limit, suspend, or revoke the approval certificate if the organisation fails to fulfil the obligations imposed by Part-145, Part-M and Part-ML, as applicable, or any conditions according to which the approval was issued.

Signed

Dated

Accountable Manager and..... (quote position).....

Chief Executive Officer ...

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

If the Accountable Manager is not the chief executive officer, the latter must then countersign the statement. Furthermore the organisation should demonstrate that the accountable manager has direct access to the chief executive office and has the necessary funding allocation for the intended maintenance activities.

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 DCA.

1.1.1 Access to the Organisation.

145.A.140

For the purpose of determining compliance with the relevant requirements of MCAR Part-145, the organisation shall ensure that access to any facility, aircraft, document, records, data, procedures or to any other material relevant to its activity subject to certification, whether it is subcontracted or not, is granted to the Inspectors assigned to perform the oversight tasks

- ☐ Maintenance Organisation commitment to grant access to any facility, aircraft, document, records, data, procedures or to any other material relevant to its activity subject to certification

1.1.2 Immediate reaction to a safety problem.

145.A.155; 145.A.95

The organisation shall implement any safety measure mandated or relevant safety information issued by DCA

- ☐ Maintenance Organisation commitment to implement safety measures mandated or safety information issued by DCA

1.2 Safety Policy and objectives.

145.A.30(a)2, 145.A.200(a)(2), AMC1 145.A.200(a)(2), 145.A.70(a)2

This chapter shall, as a minimum, include a statement committing the organisation to:

- ☐ Comply with all the applicable legislation, to meet all the applicable requirements, and adopt practices to improve safety standards
- ☐ Provide the necessary resources for the implementation of the safety policy
- ☐ Apply human factors principles, including giving due consideration to the aspects of fatigue
- ☐ Enforce safety as a primary responsibility of all managers
- ☐ Encourage personnel to report maintenance-related errors, incidents and hazards
- ☐ apply 'just culture' principles to internal safety reporting and the investigation of occurrences and, in particular, not to make available or use the information on occurrences:
 - to attribute blame or liability to front-line personnel or other persons for actions, omissions or decisions taken by them that are commensurate with their experience and training; or
 - for any purpose other than the maintenance or improvement of aviation safety

The commitment to apply 'just culture' principles forms the basis for the organisation's internal rules describing how 'just culture' principles are guaranteed and implemented

- ☐ Ensure Senior Management continually promote the safety policy to all personnel, demonstrate its commitment to it, and provide necessary human and financial resources for its implementation
- ☐ Promote proactive and systematic safety management and positive safety culture
- ☐ Define safety objectives, which:
 - form the basis for safety performance monitoring and measurement;

- reflect the organisation's commitment to maintain or continuously improve the overall effectiveness of the management system;
- are communicated throughout the organisation; and
- are periodically reviewed to ensure they remain relevant and appropriate for the organisation.

☐ Ensure that safety standards are not reduced by commercial imperatives

☐ Recognize the need for all personnel to cooperate with the compliance monitoring and internal investigations

1.3 Management Personnel.

GM1 145.A.10, 145.A.70(a)3, 145.A.30(a), AMC1 145.A.30(a), AMC1 145.A.30(b) 145.A.30(b)1, 145.A.30(b)2, 145.A.30(b)4, AMC 145.A.30(b), 145.A.30(ca), 145.A.30(f), AMC1 145.A.30(f), GM4 145.A.30(e), GM1 145.A.30(ca),

This chapter shall identify the Management Structure of the organisation by listing, as minimum, the title and names of the Accountable manager plus all the nominated persons. The group of “nominated persons” shall be chosen/identified so that all the Part-145 functions are covered under their respective responsibilities and their credentials shall be submitted to the competent authority using a written Résumé.

The MOE chapter 1.3 needs to be at any time 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 Nominated Persons;
- ☐ 1.3.3 Deputy Nominated Personnel;
- ☐ 1.3.4 Managers (if applicable);
- ☐ 1.3.5 Responsible NDT Level 3 (if applicable).

The following is an example of a Management Structure, where the name of the nominated persons shall also be identified. Procedures shall make clear who deputises for any particular person in the case of lengthy absence of the said person (this may be done by detailing the procedures to appoint a deputy nominated person or by identifying directly the person by name)

“EXAMPLE”

Management Structure	Deputies
Accountable Manager	Deputy Accountable Manager
List of Nominated Personnel: <ul style="list-style-type: none">• Base Maintenance Manager;• Line Maintenance Manager;• Workshop Maintenance Manager;• Compliance Monitoring Manager;• Safety Manager	<ul style="list-style-type: none">• Deputy Base Maintenance Manager;• Deputy Line Maintenance Manager;• Deputy Workshop Maintenance Manager;• Deputy Compliance Monitoring Manager;• Deputy Safety Manager.
List of Managers: <ul style="list-style-type: none">• Auditing Manager;• Safety Reporting Manager;• Engineering Manager;• Logistic manager.	N/A
NDT Level 3	N/A

If the same person is designated to manage both the compliance monitoring function and safety management-related processes and tasks, the accountable manager should ensure that sufficient resources are allocated to both functions, taking into account the size of the organisation, and the nature and complexity of its activities

1.4 Duties and Responsibilities of Management Personnel.

145.A.70(a)4, 145.A.30(a)1, 145.A.30(a)2, 145.A.30(b)1, AMC1 145.A.10, AMC 145.A.30(b), 145.A.30(cb)/(cc), AMC1 145.A.30(d), 145.A.200, AMC 145.A.200(a)(6), AMC4 145.A.200(a)(6), 145.A.30(c), AMC1 145.A.30(a), GM1 145.A.70(a), AMC1 145.A.30(f), 145.A.35(i), 145.A.90(b), GM1 145.A.30 (b).

The duties and responsibilities of nominated persons identified in the MOE chapter 1.3 must be detailed in this chapter. It shall be ensured that all Part-145 functions are addressed, as applicable to the Organisation. Nominated persons ensure that compliance is proactively managed, and that early warning signs of non-compliance are documented and acted upon.

Any Part-145 function, which is applicable to the Organisation (e.g. to perform the independent audit, to issue the DCA Part-145 C/S - S/S individual authorisation, to have available appropriate facilities, tools and equipment, to issue a certificate of release to service, etc.) shall be under the responsibility of a Nominated Person as listed in MOE chapter 1.3 who shall ensure compliance of that function with the relevant Part-145 regulation requirements.

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 (e.g. Deputy Maintenance Manager). 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 be at any time 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.

1.4.1 Accountable Manager.

He/she is accountable for:

- ☐ ensuring that maintenance carried out by the approved organisation meets the standards required by DCA; ☐
- establishing and promoting the safety and quality policy;
- ☐ nominating the management staff;
- ☐ ensuring that the necessary finance, manpower resources and facilities are available to enable the company to perform the maintenance to which it is committed for contracted operators and any additional work which may be undertaken;
- ☐ the supervision of the progress of the corrective actions/review of the overall results in terms of quality; ☐ for ensuring the competency of all personnel including management personnel has been assessed;
- ☐ for ensuring that any charges are paid, as prescribed by DCA i.a.w. the fees & charge regulation. ☐ to return the approval to the competent authority in case of surrender or revocation

Any additional duties and responsibilities may be added provided that they do not conflict with those of the other management personnel. Depending on the structure of the organisation some duties may be distributed differently. In case the accountable manager is not the chief executive officer, the competent authority needs to be assured that he/she has direct access to the chief executive officer and has sufficiency of "maintenance funding" allocation.

1.4.2 Compliance Monitoring Manager

Duties and Responsibilities. The following list is not exhaustive.

- ☐ He/she shall have direct access to the Accountable Manager on matters concerning the Compliance Monitoring

He/she is responsible for:

- ☐ ensuring that the activities of the organisation are monitored for compliance with the applicable requirements and any additional requirements as established by the organisation, and that these activities are carried out properly under the supervision of the nominated persons
- ☐ ensuring that any maintenance contracted to another maintenance organisation is monitored for compliance with the contract or work order
- ☐ establishing an independent audit system to monitor compliance of the Part-145 organisation with DCA requirements, and that an audit plan is properly implemented, maintained, and continually reviewed and improved
- ☐ corrections and corrective actions are requested as necessary
- ☐ establishing regular meetings with the Accountable Manager to appraise the effectiveness of the Compliance Monitoring. 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; monitoring the amendment of the organisation's procedures and standard practices (MOE, including the associated procedure(s)) and their compliance with the current revision of Part-145 plus any other applicable regulatory requirement and guidance material issued by DCA;
- ☐ submission of the MOE and any associated amendments, to the competent authority for approval (which includes completion of and submission of DCA Form(s) 2
- ☐ assessing providers of materials, standard parts, components and contracted organisations for satisfactory product quality in relation to the needs of the organisation;
- ☐ assessing subcontractors working under the Compliance Monitoring and maintaining the expertise necessary to be able to do so, to the satisfaction of DCA.
- ☐ issue /renewal/cancellation of DCA Part-145 C/S - S/S individual authorisation;
- ☐ He/she is responsible for acceptance on temporary or occasional cases base maintenance tasks (AD's, SB's) to be performed by a line maintenance organisation.
- ☐ He/she is responsible for the notification to the competent authority, as applicable according to the procedures established in the MOE, of maintenance activities conducted outside the approved locations
- ☐ establishing feedback from of audit findings into the recurrent training programme;

Depending on the Organisation structure, some of the Compliance Monitoring duties may be delegated to one or several managers who report to the Compliance Monitoring Manager.

“EXAMPLE” of Compliance Monitoring duties that could be delegated:

1.4.2.1 Auditing Manager

Duties

- ☐ implementing a quality audit programme in which compliance with all maintenance procedures is reviewed at regular intervals in relation to each type of aircraft (or component) 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;
- ☐ Follow up and closure of any non-conformances identified.

1.4.3 Maintenance Manager (may be Aircraft Base MM and/or Aircraft Line MM and/or Workshop MM).

He/she is responsible for:

- ☐ the satisfactory completion and certification of all work required by contracted operators/customers in accordance with the work specification (Work Order and approved MOE procedures);
- ☐ ensuring that the organisation's procedures and standards are complied with when carrying out maintenance;
- ☐ ensuring the competency of all personnel engaged in maintenance;
- ☐ establishing a programme of training and recurrent training using internal and/or external sources (this responsibility may be also under the Compliance Monitoring Manager);
- ☐ ensuring that any work for internal workshops or external contracted/subcontracted organisations are correctly detailed in a work order/contract and that the requirements of the contract/work order are fulfilled in respect of inspection;
- ☐ providing feedback to the Compliance Monitoring about the services provided by contracted Organisations, Subcontractors;
- ☐ responding to quality deficiencies in the area of activity for which he/she is responsible, which arise from independent quality audits;
- ☐ ensuring, through the workforce under his/her control, that the quality of workmanship in the final product is to a standard acceptable to the organisation and DCA;
- ☐ the implementation of the safety policy and human factor issues;
- ☐ availability of facilities appropriate to the planned work including hangars, workshops office accommodation, stores as applicable for the planned work;
- ☐ availability of a working environment appropriate to the tasks being undertaken;
- ☐ the incoming inspection of components, parts, materials, tools and equipment, the related classification, segregation and storage according to the manufacturer's recommendations ;
- ☐ developing a production planning system appropriate to the amount and complexity of the maintenance scope of work;
- ☐ availability of tools, equipment and materials to perform the planned tasks;
- ☐ availability of sufficient competent personnel to plan, perform, supervise, inspect and certify the work being performed;
- ☐ availability of all necessary maintenance data;
- ☐ recording and notifying any inaccurate, incomplete or ambiguous procedure, practice information or maintenance instruction contained in the maintenance data used by 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 ensure such documents comply with 145.A.45 (e) ;
- ☐ notifying the Accountable Manager whenever deficiencies emerge which require his attention in respect of finance and the acceptability of standards (Accountable Manager and Compliance Monitoring Manager to be officially informed of any lack of 25% of available man-hours over a calendar month);
- ☐ supplying the necessary technical documents for customers and storage of the organisation's technical records;

Any additional duties and responsibilities may be added provided they do not conflict with those of other management personnel.

Depending on the Organisation structure, some of the maintenance duties may be delegated to one or several managers who report to the Maintenance Manager ((may be Base MM and/or Line MM and/or Workshop MM).

"EXAMPLE" of maintenance duties that could be delegated:

1.4.3.1 Engineering Manager

Duties

- ☐ Ensuring the availability of all necessary maintenance data;
- ☐ Supplying the necessary technical documents for customers and storage of the organisation's technical records;

- ☐ Recording and notifying any inaccurate, incomplete or ambiguous procedure, practice information or maintenance instruction contained in the maintenance data used by 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 145.A.45 (e) ;

1.4.3.2 Logistics Manager

Duties

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

1.4.4 Responsible NDT Level 3⁷

Duties and Responsibilities. The following list is not exhaustive.

He/she is responsible to

- ☐ ensure that the applicable NDT requirements (e.g. 145.A.30(e), EN4179, etc.) are met and to act on behalf of the employer in this area;
- ☐ develop the MOE 3.17 procedures related to the qualification of NDT staff.
- ☐ develop and approve the NDT Manual for specific technique(s) within each method used within the maintenance organisation.

1.4.5 Safety Manager

The safety manager remains the unique focal point for the development, administration, and maintenance of the organisation's safety management processes.

Duties and Responsibilities. The following list is not exhaustive.

He/she is responsible to:

- ☐ managing the safety reporting scheme and the occurrence reporting system, including initiation and follow-up of internal occurrence investigations;

The organisation should assign responsibility with clearly defined authority, for coordinating action on airworthiness occurrences and for initiating any necessary further investigation and follow-up activity. It is recommended that this function is attributed to the Safety Manager as it is strictly linked with the safety reporting scheme.

- ☐ facilitate hazard identification, risk assessment and management;
- ☐ monitor the implementation of actions taken to mitigate risks, as listed in the safety action plan, unless action follow-up is addressed by the compliance monitoring function;
- ☐ provide periodic reports on safety performance to the safety review board ☐ ensure the maintenance of safety management documentation;
- ☐ ensure that there is safety training available, and that it meets acceptable standards; ☐ provide advice on safety matters
- ☐ establishing feedback from maintenance incidents/issues and feeding these back into the recurrent training programme;

"EXAMPLE" of duties that could be delegated

1.4.5.1 Safety Reporting Manager

⁷ Even though the Responsible NDT level 3 does not directly report to the Accountable Manager, he is strongly recommended to provide a Résumé

Duties

- ☐ managing the safety reporting scheme and the occurrence reporting system, including initiation and follow-up of internal occurrence investigations;

1.5 Management Organisation Chart.

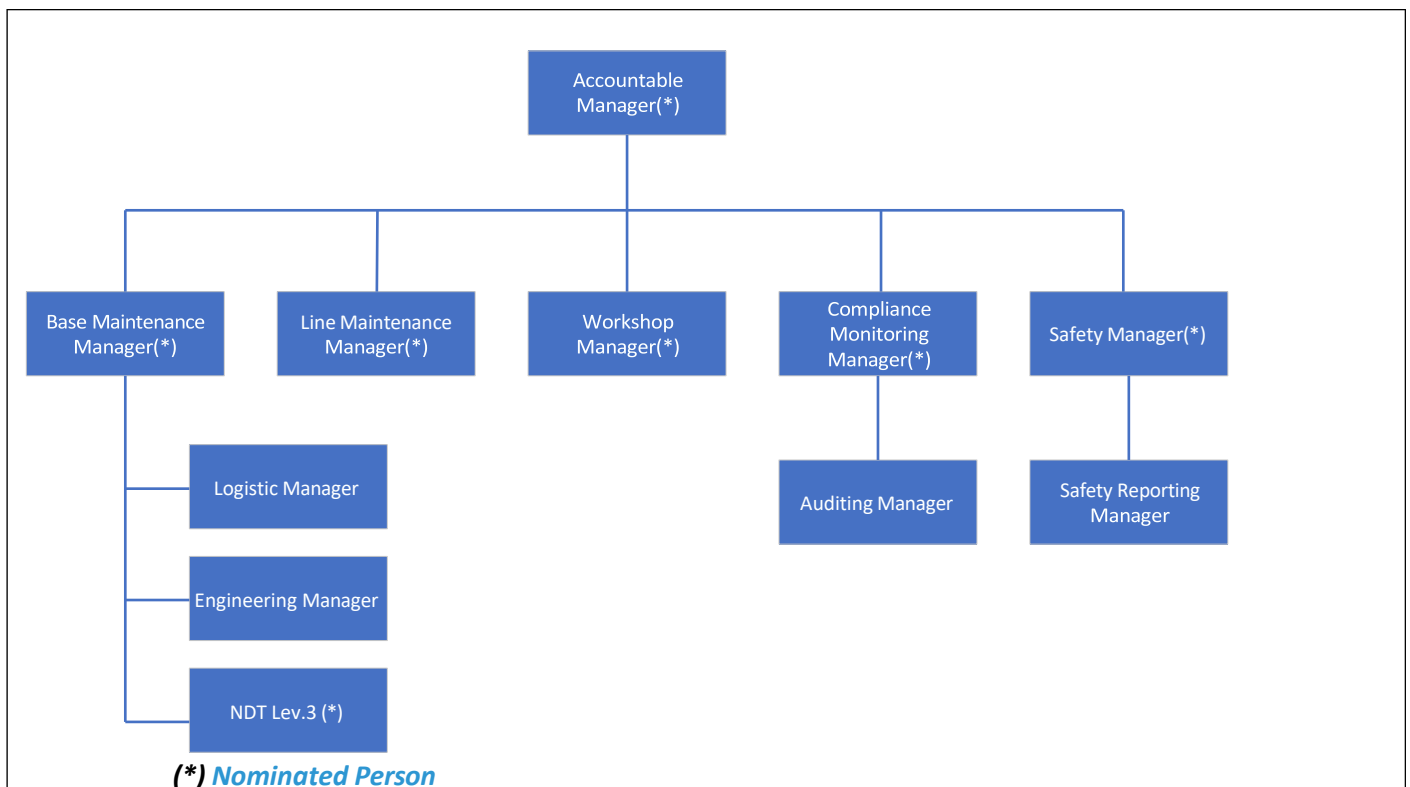
145.A.70(a)5; GM1 145.A.30(cb)

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 (e.g. Auditing Manager, etc.) they need also to be reflected in the organisation chart to show that they report ultimately through a “nominated person” to the Accountable Manager. There are different ways to set up the organisation structure. The key principle is that, regardless of the arrangement, there is one nominated person responsible for each Part-145 function and this responsibility is recognised by that nominated person and the accountable manager. This responsibility should not be diluted into the various levels of management and should be free of conflicts of interest.

The Organisation chart of this chapter needs to be at any time 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

The following is an example of a Part-145 Approved Maintenance Organisation structure:

“EXAMPLE”



The Nominated Persons shall be clearly identified in the chart. The names of the management personnel may be included in the boxes of the organisation chart but this is optional.

Compliance monitoring staff (e.g. quality auditor) must be shown to be independent from the Maintenance Managers.

Certifying staff cannot report to the Compliance Monitoring Manager to ensure this function remains independent from maintenance functions.

1.6 List of Certifying Staff, support staff and airworthiness review staff

145.A.30(g), 145.A.30(h)1, 145.A.30(h)2, 145.A.30(j)1, 145.A.30(j)2, 145.A.30(i), 145.A.30(k), 145.A.35(a), AMC 145.A.30(g), AMC1 145.A.30(h), 145.A.70(a)6, Appendix IV, 145.A.75(f).

1.6.1 Certifying Staff (C/S) and Support Staff (S/S).

This chapter shall detail the scope of the licence C, B1, B2 and A categories certifying staff and support staff, the different categories of Certifying staff and Support Staff depending on the intended scope of work, the content of the list and its management (in conjunction with Chapter 1.10, 1.11).

1.6.1.1 Scope of the National Licence.

- ☐ Summary (preferably in a table) of the privileges of the national license (Associated limitation(s) shall be also recorded);

1.6.1.2 Categories of Certifying Staff (C/S) and Support Staff (S/S).

Based upon the above comparison, the procedure shall define the privileges to be granted under the Part-145 approval for each certifying staff category.

- ☐ Aircraft Base maintenance certifying staff (category C); Aircraft Base maintenance support staff
☐ (category B1, B2, B3); Aircraft Line maintenance certifying staff⁸:
☐ ☐ Category B1;
☐ Category B2 ;
☐ Category B3, if applicable⁹;
☐ Category A (The tasks each staff is authorized to release, have to be recorded in the individual authorisation).
☐ List of tasks which may be authorised

When the organisation is making use of task trained certifying staff (such as cat. A certifying staff, etc.), the specific list of authorised task (as applicable to the scope of work of the organisation) shall be agreed by DCA by means of an MOE procedure in this chapter. Refer to AMC 145.A.30(g) for the typical tasks which may be permitted after task training.

- ☐ Engines certifying staff (DCA FORM 1); Components certifying staff (DCA FORM 1);
☐ Specialised Services (NDT) certifying staff (DCA FORM 1).

1.6.2 Airworthiness review staff

This paragraph is only applicable to organization with this privilege.

⁸ Certifying staff of any line maintenance station must be qualified in accordance with DCA Part 66.

⁹ Category B3 is applicable to piston-engine non-pressurized aeroplanes of 2000 Kg MTOM and below (ref. 66.A.3(c))

1.6.3 Content of the list(s).

This list must include at least the following main information, as applicable:

- ☐ Name/forename; DCA C/S Category;
- ☐ Identification of the Support Staff for Base maintenance activity; Function;
- ☐ Authorisation identification number; Sample of the signature;
- ☐ Date of the first issue of the authorisation; Expiry date of the authorisation; Scope/limitation of the authorisation;
- ☐ For aircraft certifying staff and support staff only, the aircraft maintenance license identification number;
- ☐ Line and base maintenance certifying staff authorised under the protected rights as per Part-145 Appendix IV, paragraph 2.

1.6.4 Management of the list(s).

This procedure shall detail the following:

- ☐ Identification and management of the list(s);
- ☐ Approval of the list in conjunction with MOE chapter 1.10 and 1.11; Retention of records:
 - ☐ • Duration / location;
 - ☐ • Type of documents (evidences,).

The list(s) may be directly inserted in this chapter of the MOE or managed as a separate associated list.

1.7 Manpower Resources.

145.A.70(a)7, 145.A.30(d)

The organisation must be able to demonstrate that they have adequate manpower resources to support the entire scope of approval.

The organisation shall not declare a percentage of staff used but shall indicate the number of staff needed to comply with Part-145 requirements.

*There is no need to amend this chapter as result of routine fluctuations, however any significant re-deployment or loss of staff or any staff change having impact on the approval shall be captured and notified to DCA according to the criteria specified in the **MOE 1.10**.*

- ☐ Summary indication of the total number of staff including all the staff categories below
The number of staff declared in this MOE and the latest application Form 2 shall remain consistent.
- ☐ Splitting of the total staff number in the various staff categories. A summary table is expected
 - ☐ Management personnel
 - ☐ Technical support staff
 - ☐ Compliance Monitoring staff
 - ☐ Safety Management staff
 - ☐ Certifying staff
 - ☐ Base maintenance support staff
 - ☐ Maintenance technical staff other than certifying staff and support staff
 - Store and purchasing department staff
 - Training staff
 - Contracted staff

1.8 Facilities.

145.A.70(a)8, 145.A.25(a)1, 145.A.25(a)2, AMC1 145.A.25(a) , 145.A.25(b), AMC 145.A.25(b), 145.A.25(c)1, 145.A.25(c)2, 145.A.25(c)3, 145.A.25(c)4, 145.A.25(c)5, 145.A.25(c)6, 145.A.75(d), 145.A.40(a)iii, Appendix III

This section shall describe each of the facilities, in some detail, at which the organisation intends to carry out maintenance. Facilities such as stores, line stations, component or subcontractors workshops that are not located together with the main facilities of the organisation may be covered by the organisation approval without being identified on the organisation certificate, provided that the MOE identifies these facilities and contains procedures to control such facilities, and the competent authority is satisfied that they form an integral part of the approved maintenance organisation.

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 Principal Place of Business (PPB).

The PPB is the head office or the registered office of the Organisation within which the principal financial functions and operational control of the activities referred to in Part-145 regulation are exercised.

The PPB is the address which will be included in the DCA Form 3 approval certificate together with the main base sites address(es).

☐ 1.8.2 Postal (surface mail and e-mail) address

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

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

☐ 1.8.3 Base maintenance facilities

- ☐ Hangar accommodation (means a closed facility that can house an aircraft and protects from environmental condition. Hangar facilities shall be equipped with doors).

The Part-145 AMC states that "subject to a risk assessment and agreement by DCA, the organisation may use facilities at the approved location other than a base maintenance hangar for certain aircraft base maintenance tasks, provided that those facilities offer levels of weather and environmental protection that are equivalent to those of a base maintenance hangar, as well as a suitable working environment for the particular work package."

This means that for the execution of limited Base Maintenance tasks, being for example tasks with limited disassembly, inspection, repair, etc., facilities other than an enclosed hangar could be acceptable subject to a risk assessment, considering the probability and the consequences of the presence of the different hazards, such as local environmental conditions, etc.

This possibility however, does not exempt an organisation from the requirement to have a base maintenance hangar in order to be approved to conduct base maintenance at a given location. Furthermore, this clarifies that for Aircraft Base Maintenance tasks which requires extensive disassembly, inspection, repair, etc., proper facilities are those that enclose the whole aircraft (being equipped with doors, roof, lateral walls, etc. conforming to a "closed building structure"). Closed facilities are indeed the only means to fully mitigate the risks presented by hazards such as the ingress of rain, hail, ice, snow and dust, the effects of wind, the presence of wildlife such as birds, rodents, etc.

- Hangar layout(s) shall be included specifying the various allowed aircraft parking configurations, as applicable to the aircraft type(s) included in the scope of approval.

As a minimum, this information shall clarify for any approved Hangar, the maximum number of aircraft which can be accommodated at the same time (including any Base and/or Line Maintenance activity), the maximum number of aircraft which can undergo Base Maintenance at the same time and which is the biggest aircraft type which can be accommodated.

- ☐ Aircraft access equipment/platforms/docking
- ☐ Specialised workshops
- ☐ Environmental provisions
- ☐ Office accommodation for: (planning, technical records, Quality, technical reference area, Storage, etc)

- ☐ 1.8.4 Line maintenance facilities (at each location) as appropriate.
- ☐ Hangar availability (specify if rented or owned)

In case the Hangar facility is not available at the location, this shall be clearly stated. As a general guidance, in such case, the scope of work of the particular line station should not exceed the weekly check. Inclusion of other minor scheduled maintenance tasks is subject to detailed assessment that they can be carried out safely to the required standards at the designated line maintenance station.

- ☐ 1.8.5 Engines / APU and Component maintenance facilities.

- ☐ 1.8.6 Layout of premises

Where the accommodation is not owned by the organisation, as in the case of a hangar where space is rented or shared, proof of tenancy/access may be required and the competent authority may wish to have this included in an Appendix or Supplement to the MOE.

For line maintenance of aircraft, hangars may be required. In this case the availability of a suitable hangar shall be demonstrated, particularly in the case of inclement weather for minor scheduled work and lengthy defect rectification.

Note: The hangar visit plan requirement is expected to be in the MOE chapter 2.22, due to relation with the man-hour plan.

- ☐ 1.8.7 Subcontractors facilities

The detail of information of this paragraph depends from the extent of subcontracted activities, as agreed with the allocated inspector. For simple subcontracted tasks (e.g. specialised services) It may be sufficient to link to the list of Subcontractors already included in the MOE 5.2 where each subcontractor is identified. Where assembly/repair activities and/or issuance of certificates of release to service is carried out at the subcontractor's facilities, a layout of the subcontractor's facilities which are intended to be part of the approval is to be included in this paragraph.

1.9 Scope of Work

145.A.70(a)9, 145.A.10, AMC1 145.A.10, GM1 145.A.10, 145.A.20, AMC 1&2 145.A.20, 145.A.42(b)(iii) , AMC1 145.A.42(b)(iii) , AMC 145.A.45(b), 145.A.75(a), 145.A.75(b), 145.A.75(c),145.A.75(d), 145.A.75(e), 145.A.75(f), Appendix II, Appendix III; GM1 145.A.45(b)

This chapter must show the range of work carried out at each approved site. When a maintenance organisation is performing maintenance in multiple locations the corresponding scope of work shall additionally be detailed for each site. This shall also relate to chapters 1.8 & 5.3 in such a way that it can be clearly seen which specific tasks are performed at each location. Limitations to the scope of approval may apply to the case of small organisations.

1.9.1 Aircraft Maintenance.

“EXAMPLE”

RATING	TC HOLDER	AIRCRAFT TYPE/GROUP RATING	LIMITATION	Model	MAINTENANCE LEVEL up to and including the following:	Base	Line
A1	AIRBUS	Airbus A300 basic model (GE CF6)	Airbus A300 basic model	A300 C4-203	Daily check		X
A1	AIRBUS	Airbus A300 basic model (PW JT9D)	Airbus A300 basic model	A300 B2-320	Weekly check Excluding defect rectification		X
A1	AIRBUS	Airbus A318 /A319/A320/A321 (CFM56)	Airbus A318 /A319/A320/A321	A318-111 A321-111 A321-212	750 FH/ 750 FC / 4 months		X
A1	ATR-GIE Avions de Transport Régional	ATR 42- 400/500/72-212A (PWC PW120)	ATR 42- 400/500/72-212A	ATR 42-400 ATR 42-500	5000 FH / 3000 FC / 2 YRS	X	
A1	The BOEING COMPANY	Boeing 777- 200/300 (GE90)	Boeing 777- 200/300	777-200	112000 FH/ 30000 FC/ 12000 days	X	X
A1	The BOEING COMPANY	Boeing 737- 300/400/500 (CFM56)	Boeing 737- 300/400/500	737-500	2A check		X
A1	The BOEING COMPANY	BOEING 767- 200/300 (PW 4000)	BOEING 767- 200/300/400	767-200	4C check	X	X
A2	The BOEING COMPANY	BOEING 767- 200/300/400 (GE CF6)	BOEING 767- 200/300/400	767-200	Weekly checks		X
A2	LAVIA ARGENTINA S.A. (LAVIASA)	Piper PA-25 (Lycoming)	Piper PA-25	PA-25-235	100H/Annual check	X	
A3	AIRBUS HELICOPTERS	Eurocopter AS 355 (RR Corp 250)	Eurocopter AS 355	AS355 E AS355 F1	Daily		X
A4				NIL			

Legend: FH-flight hours, FC-flight cycles, YRS-years



The following shall be included for each A/C type:

- ☐ column TC holder: the information from the column “TC Holder” of the table in Appendix I to AMC to Part- 66, as amended.
- ☐ column Aircraft Type/Group Rating: the full information from the column “Part- 66 Type rating endorsement” of the table in Appendix I to AMC to Part-66, as amended, needs to be entered. For example, an organisation only maintaining the model Airbus A321-212, shall enter in this column the full “Part- 66 Type rating endorsement” Airbus A318 /A319/A320/A321 (CFM56)
In case of group rating, each aircraft composing the group shall be listed.
Some engines may be installed on aircraft as per STC (refer to the list of approved STC on the DCA website)
- ☐ column limitation: this corresponds to the column limitation in the oversight management software (OMS) product list
- ☐ column aircraft Model: the data from column “Model” in the oversight management software (OMS) product list. Only the models which are effectively maintained by the organisation need to be listed.

- ☐ Column Maintenance level: the scope of maintenance activity agreed by the Competent Authority.

The following considerations shall be done on the maintenance level:

- *The limitation relative to the maintenance checks/tasks shall use the naming convention as referenced in TC Holder data (e.g. MRB/MPD).*
- *In case of unforeseen maintenance such as but not limited to major repairs and modifications that is not already described within this chapter, the maintenance organisations shall contact the competent authority.*
- *The maintenance level is intended to specifically identify the maximum extent of routine maintenance allowed. Defect rectification, out of phase tasks, SB, deferred items, etc., are considered included in the line and/or base maintenance scope of work, subject to the decision making process to be described in the **MOE 2.28 procedure**. A maintenance organisations not intending to perform defect rectification shall exclude defect rectification in the 1.9.*
- *Limitations to unscheduled line maintenance or base maintenance capability shall be stated (e.g. excluding structural repairs, excluding landing gear replacement, etc.)*
- *In the case of line maintenance, a clear definition of the line maintenance as applicable to the particular organisation, taking into account the regulatory limitations included in AMC1 145.A.10 and the actual capability hold.*

1.9.2 Engine Maintenance.

“EXAMPLE”

RATING	ENGINE/APU LIMITATION	Engine/APU Model	MAINTENANCE LEVEL
B1	HONEYWELL TFE731-20 Series	TFE 731- 20AR TFE731-20BR	Modules turbine exchange
B1	GE CF6-80E1 Series	GE CF6-80E1A1 GE CF6-80E1A2	All Modules repair
B1	PWC 545 Series	PWC 545A PWC 545C	Repairs IAW CMM Hot Section inspection
B2	CONTINENTAL A-65 Series	A-65-14J A-65-3	O/H
B3	HONEYWELL 85 Series	85-115 Series 85-37 Series	Minor repair i.a.w CMM 49-XX-XX

- ☐ **For engines only**, shall be mentioned in this table:
 - ☐ in column Engine / APU Limitation: the engine limitation as listed in the oversight management software product list;
 - ☐ in the column models: the engine models as defined in the oversight management software product list; Only the models which are effectively maintained by the organisation need to be listed;
 - ☐ in the column Maintenance level: the scope of work agreed by the Competent Authority, reference to the relevant maintenance data shall be made;
 - ☐ when the maintenance performed under B1 or B3 rating is limited to boroscoping inspections, the MOE shall specify the engine/APU types associated to the boroscoping technique limitation;

- ☐ **For APU only**, shall be mentioned in the table:
 - ☐ in column Engine / APU type: the APU limitation as listed in the oversight management software product list
 - ☐ in the column Limitation: the APU models as defined in the oversight management software product list; Only the models which are effectively maintained by the organisation need to be listed
 - ☐ in the column Maintenance level: the scope of work agreed by the Competent Authority, reference to the relevant maintenance data shall be made.

1.9.3 Component Maintenance.

This section shall specify the component manufacturer or the particular component and/or cross refer to a referenced capability list. The part number and the level of work performed shall be included. The reference of the relevant CMM shall also be added.

“EXAMPLE”

Rating	ATA	P/N	Designation	Manufacturer	Reference of the CMM	Level of maintenance	Work Shop
C1 Air Cond & Press	21						
C2 Auto Flight	22						
C3 Comms and Nav	34						
C4 Doors - Hatches	52						
C5							
C6							
C7							
C8							
C9							
C10							
C11							
C12							
C13							
C13							
C13							
C14							
C15							
C16							
C17							
C18							
C19							
C20							
C21							
C22							

☐ **For C rating**, shall be mentioned:

- ☐ in the column Rating: the relevant class C rating, if some C ratings are not used, the line remains empty,
- ☐ in the column ATA, the ATA Specification 2200 chapter,
- ☐ in the column P/N, Designation and Manufacturer: the detailed reference number and designation of the component together with identification of the Manufacturer as per CMM,
- ☐ in the column CMM: the reference of the component maintenance manual (or equivalent document),
- ☐ in the column Level of maintenance: the scope agreed by the Competent Authority
- ☐ in the column Work shop: the base maintenance shop where maintenance takes place.

When an Organisation is managing a separate “capability list” the information addressed above shall be mentioned in this list. In this case the chapter 1.9 shall only address the rating, the ATA and shall refer to the capability list reference (see example below).

“EXAMPLE”

Rating	ATA	P/N
C1 Air Cond & Press	21	Components in accordance with the capability list reference XXXX
C2 Auto Flight	22	
C3 Comms and Nav	23-34	
C4 Doors- Hatches	52	

Rating	ATA	TC holder name	Propeller limitation	P/N
C16 Propeller	61			Components in accordance with the capability list reference XXXX
	61			

This list, whatever included to or separated from the basic MOE, is an integral part of the approval. This means that it shall be approved (directly by the authority or indirectly by the organisation, through a procedure which has been previously approved by the competent authority (refers to Chapter 1.10, 1.11)).

1.9.4 Specialised Services Maintenance.

1.9.4.1 NDT with D1 Rating.

When the Organisation intends to perform NDT tasks and release such tasks using an DCA Form 1, the rating D1 is necessary. Under the D1 rating, the capability to perform maintenance is determined by the “NDT method” listed in the terms of approval, regardless the specific aircraft, engine or component which is subject to the inspection method.

“EXAMPLE”

Rating	Limitation	Detail of limitation
D1	Liquid penetrant (PT)	techniques to be identified here
	Magnetic particle(MT)	
	Eddy Current (ET)	
	Ultrasonic (UT)	
	Radiography (RT)	
	Thermography (IRT)	
	Shearography (ST)	

- ☐
For D1 rating, shall be mentioned:
 - in column Rating: D1,
 - in column Limitation: shall be quoted the NDT method (strikethrough as necessary)

1.9.4.2 NDT without D1 Rating (“in the course of maintenance”).

When the Organisation intends to perform NDT tasks under another approved rating (e.g. as part of the maintenance carried out on aircraft under rating A1, engines under rating B1, components under a C rating) the NDT tasks are considered done in the “course of maintenance”.

- ☐
In this case, even if the Organisation does not need to hold a D1 rating, the various NDT methods applied during maintenance shall be listed in this paragraph for. When the organisation holds a fixed NDT capability (e.g. personnel, facility, equipment) at different specific sites or workshops, the information has to be stated.

It has to be noted that the same requirements in place for being approved under the D1 rating remain applicable.

1.9.4.3 Other Specialised Activities

- ☐ Each specialised maintenance tasks such as but not limited to composite repairs*, painting, welding, machining, NDI, shall be detailed in this paragraph
- ☐ These specialised services maintenance shall be detailed for each approved site and workshop

“EXAMPLE”

Specialised activity	Reference data	Location/ workshop
Cd plating	AMS2401	Workshop 7
Heat treatment	BAC 5602	Workshop 3

It has to be noted that those specialised maintenance tasks may need to be carried out under specific conditions (e.g. aircraft painting is considered to be a base maintenance task and therefore a base maintenance scope of approval is required in addition to listing such activity in this chapter).

1.9.5 Maintenance Away From the Approved Locations.

- ☐ If applicable, this paragraph shall make reference to the fact that the Organisation may perform works away from the approved locations, subject to the condition specified in **MOE 2.32** (Maintenance away from the approved locations).

It shall be noted that this privilege, is approved by the competent authority based upon the ability of the Compliance Monitoring to deal adequately with the Part-145 requirements. This ability cannot be therefore demonstrated at the time of the initial approval. In any case this procedure cannot be detailed in the MOE and therefore approved by the competent before the first 2 year period has been completed.

1.9.6 Parts Fabrication

If applicable, this paragraph shall make reference to the fact that the Organisation may fabricate parts in the course of maintenance, subject to the condition specified in **MOE 2.30** (Fabrication of parts).

The part fabrication is to be considered under an approved rating (e.g. as part of the maintenance carried out on aircraft under rating A1, engines under rating B1, components under a C rating).

1.9.7 Component maintenance under aircraft or engine rating

GM1 145.A.45(b) describes the typical maintenance data which is intended to be used depending from the class rating approval held by the organisation. *This paragraph is optional and only intended to cover the case where the competent authority agrees on the possibility to use other maintenance data to that specified in GM1 145.A.45(b) (e.g. an Ax rated AMO wishing to use engine and/or component maintenance data on-wing, a Bx rated AMO wishing to use component and/or aircraft maintenance data, etc.)*

- ☐ If applicable, this paragraph shall make reference to the fact that the Organisation may maintain components under aircraft or engine ratings, subject to the condition specified in MOE 2.31 (procedures for component maintenance under aircraft or engine rating)

1.9.8 Airworthiness review privileges

This paragraph is only applicable to organization with this privilege.

1.10 Procedures for changes (including MOE amendment) requiring prior approval.

145.A.70(a)10, AMC1 145.A.48(a), 145.A.85(a), 145.A.85(b); 145.A.15(a)/(b), AMC 145.A.15(a)/(b), Appendix III to AMC 145.A.15; 145.A.85(a); 145.A.85(b); AMC2 145.A.15;AMC 1 145.A.85; AMC 2 145.A.85; GM1 145.A.85(a)(1) ; GM1 145.A.85(a)(2) ; GM1 145.A.85(b) .

This chapter describes the changes requiring prior approval by DCA.

1.10.1. Definition and Notification of changes requiring prior approval

The organisation shall notify the competent authority of any proposal to carry out any of changes listed below before such changes take place.

- ☐ When to notify the change (All changes need to be notified before being implemented) Who in the maintenance organisation is in charge of the notification
- ☐ Table (to be customized by the organisation as applicable to the scope of activity) listing the various type of changes

“EXAMPLE”

The table below indicates the type of changes which requires prior approval by DCA.

When the organisation is not granted the possibility to manage changes not requiring prior approval as per MOE 1.11 chapter, all the possible changes shall be subject to prior approval and included in this chapter/table below.

Type of change		Examples of change	Documentation to be provided	
			To DCA	To the allocated inspector (may be an DCA inspector or allocated NAA inspector)
ADDRESSES	Change of Organisation Name		Form 2 + Certificate of Incorporation	<ul style="list-style-type: none"> Form 2 + Certificate of Incorporation MOE & associated documents as applicable
	Change to the locations/facilities of the maintenance organisations with or without amendment to the scope or capability	<ul style="list-style-type: none"> PPB address change; Address change of any maintenance site already approved; Additional or cancellation of maintenance sites 	Form 2 + Certificate of Incorporation in the case of PPB change	<ul style="list-style-type: none"> Form 2 + Certificate of Incorporation in the case of PPB change MOE & associated documents as applicable
PERSONNEL	Change of the Accountable Manager or Nominated Persons identified in the MOE 1.3		<ul style="list-style-type: none"> Form 2 Résumé 	<ul style="list-style-type: none"> Form 2 Résumé (as applicable) MOE & associated documents as applicable;

CAPABILITY	Reduction or increase of the staff number when the variation: <ul style="list-style-type: none"> Is more than 10% of the total staff number declared in the MOE 1.7 or; Is impacting the fees to be paid to DCA, or Is affecting the approval. <p>Note: permanent and contracted staff shall be considered.</p>	<ul style="list-style-type: none"> Reduction of 11 staff when the staff to maintain the DCA approval was 100 All certifying staff for a certain aircraft type approved under A1 rating leave the Organisation; Change from 9 staff to 10 staff 	Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
	Reduction or increase of the scope of work or scope of approval under Ax rating.	<ul style="list-style-type: none"> Addition/removal of an Ax rating; Addition of a new aircraft to the Ax scope of approval; Extension of the scope of approval from line to base maintenance; Extension of the maintenance level check from daily to A check for an aircraft already included in the approval; Addition of an engine type associated to an A/C type/model inside a rating Ax already approved. 	Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
CAPABILITY	Reduction or increase of the scope of work or scope of approval under Bx, rating	<ul style="list-style-type: none"> Addition/removal of an Bx rating; Addition of a new engine type to the Bx scope of approval; Extension of the maintenance level check From repair to overhaul for an engine already included in the approval; 	Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
	Reduction or increase of the scope of work or scope of approval under Cx rating	<ul style="list-style-type: none"> Addition of a P/N to the capability which requires a new Cx rating; 	Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
	Addition or cancellation of NDT method under D1 rating		Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
	Addition of any specialised services under any rating in the course of maintenance	<ul style="list-style-type: none"> Addition of welding capability under any rating; Addition of painting capability under any rating; Addition of heat treatment capability Addition of tap test 	Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
PROCEDURES	Any change to the procedures that affects the approval.		Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated documents as applicable
AIRMOc	Use of an alternative means of compliance	<ul style="list-style-type: none"> <i>Deviations from the DCA AMC material</i> 	Form 2	<ul style="list-style-type: none"> Form 2 MOE & associated procedures as applicable

1.10.2. Pre-audit and Compliance Monitoring Manager statement

For initial approval and change of approval applications, the organisation shall carry out an internal “pre-audit” in accordance with its **MOE 3.8** audit procedure, prior to the audit by the competent authority, confirming that processes,

areas, activities and personnel subject to the application have been reviewed and audited showing satisfactory compliance with all applicable Part-145 requirements.

The relevant audit report together with a statement of compliance from the Compliance Monitoring Manager need to be provided to the allocated inspector, demonstrating how the organisation will comply with the requirements established in Part-145 regulation. This should include evidence of managing the safety risks and conducting a risk assessment related to the change.

The requirement to have such internal “pre-audit” carried out as part of any application for change, shall be addressed in a procedure under this **MOE 1.10 chapter**.

1.10.3 Approval Process of changes requiring prior approval

MOE and associated procedures/list shall be reviewed on a regular basis so that they remain an up-to-date description of the organisation and they comply with any amendment of the applicable DCA regulation.

The initial issue of the MOE and/or any associated procedures/lists shall be approved by DCA.

The fact a prior approval for a document was issued does not mean that the particular document is exempted from further technical review by the assigned inspector or other inspector designated by the competent authority. This activity is done on sampling basis and findings may be raised after a document approval in case non-compliances are identified with applicable DCA regulations. Furthermore, an DCA approval does not exempt the maintenance organisation to monitor continuously the approved documents, and raise internal findings in case any non-compliance is identified.

Note: when the MOE chapter 1.11 does not include a procedure to set the scope of changes not requiring prior approval, any amendments to the MOE and/or associated procedures/lists shall be subject to prior approval by DCA.

- ☐ Person responsible for amending MOE and associated procedures/list
- ☐ Definition of criteria for new issue and/or revision (e.g. depending from the MOE revision system numbering adopted as described in this user guide, paragraph **1.4.1 “Management control of the MOE”**)

1.10.4 Management control of the approval

This paragraph is intended to describe how the Compliance Monitoring controls the Part-145 approval,

- ☐ Record of approvals issued by DCA
- ☐ Record of internal approvals issued by the maintenance organisation under indirect approval privileges Process to ensure maintenance personnel only have access to the approved MOE/associated procedures/lists.
- ☐ Description of the process in place to control amendment of the applicable regulations and user guides, assess their impact on the organisation’s procedures/lists and when applicable revise those procedures/lists within any established entry into force date

The Compliance Monitoring is responsible to assess any revision of the applicable regulations and user guides for their impact on the organisation’s procedures/lists. DCA expects that a traceable evidence is in place to record implementation of this process to be confident that the organisation’s procedures/lists finally comply with any applicable requirement.

- ☐ (Optional) this paragraph may be used to list the applicable regulations and user guides, together with their revision status, which have considered for the development of the current revision of the MOE and associated procedures/lists

1.10.5. Changes not requiring amendment of the approval

- ☐ In the case the organisation temporarily does not hold all the necessary tools, equipment, material, maintenance data, etc., the competent authority shall be informed to determine if a need exist to amend the approval or if it may be maintained subject to further conditions.

1.11 Procedures for changes (including MOE amendment) not requiring prior approval.

145.A.70(a)11, 145.A.70(a)12, GM1 145.A.70(a), 145.A.70(b), 145.A.70(c), 145.A.85(c), 145.A.65(b)2, AMC 145.A.65(b), AMC 145.A.65(b)(2), Appendix III, AMC to Appendix III ; AMC 1 145.A.85;

This procedure is optional and intended to describe the approval process of changes not requiring prior approval. This privilege may be granted to the organisation for certain changes to the organisation or amendments of the MOE and/or associated procedures, by delegating the approval to the Compliance Monitoring function.

Such a delegation is to be based upon the ability of the Compliance Monitoring function to deal adequately with the Part-145 requirements .

1.11.1 Definition of changes not requiring prior approval

As a general principle, the following examples may be considered for changes not requiring prior approval:

- *Correction of type errors on any document*
- *Amendment of an associated procedure not affecting the approval*
- *Addition or cancellation of P/N in the approved capability list where the DCA Part-145 “C” rating is held and any additional component is of similar technology & within existing ATA chapter capability*
- *renewal of C/S authorisation date in the C/S list*
- *Addition/removal of a subcontractor not affecting the approval*
- *Addition/removal of a contracted organisation not affecting the approval*

1.11.2 Summary table of documentation which constitutes the approval.

*The maintenance organisation needs to decide the structure of the MOE and particularly if there is a need to use associated procedures/lists. Criteria to guide the maintenance organisation in this decision is provided in the **General Guidance of this User Guide** (par. 1.7 “Structure of the MOE”).*

A table has to be included in this paragraph summarizing the documents which are part of the approval and identify the ones where DCA has agreed that certain changes can be managed without prior approval by DCA.

- ☐ Type of document part of the approval (column 1) - *Enter the document type*
- ☐ Document reference (column 2) - *Specify for each document a unique identification (e.g. DCA DOC 1, etc.)*
- ☐ Identification whether the related document can be changed without prior approval by DCA (column 3)
- ☐ Who is approving the document (column 4) – *Specify for each document the person or entity that is authorised to approve the document*
- ☐ Definition of changes which can be done without prior approval by DCA (column 5) - *Specify for each document the changes which can be done without prior approval (as agreed with the assigned inspector)*

☐ Remarks (column 6) - Specify any relevant remark (e.g. where the organisation provides continuous access to document through their IT system)

“EXAMPLE”

1.Type of Document	2.Document reference	3. Can be amended without prior approval? (YES/NO)	4.Approved by	5. detail of changes which can be implemented without prior approval (as agreed with the assigned inspector)	6. Remarks
MOE	DCA Doc 1	YES	Compliance Monitoring Manager	Correction of Typing errors	
Safety Management Manual	DCA Doc 1a	YES	Compliance Monitoring Manager	all matters related to safety management, excluding any change affecting the terms of compliance with Part-145 regulation	
Certifying staff and Support staff list	DCA Doc 2	YES	Compliance Monitoring Manager	renewal of C/S authorisation date in the C/S list	
Workshop capability list	DCA Doc 3	NO	DCA		
List of Subcontractors	DCA Doc 4	YES	Compliance Monitoring Manager	Addition/deletion of subcontractors	Accessible at www.XXX.com/YYYY (permanent access credentials granted to allocated Inspector)
List of Line Maintenance Locations	(...)	(...)	(...)	(...)	
NDT Written Practice	(...)	(...)	(...)	(...)	
Associated Procedures Manual ¹⁴	(...)	(...)	(...)	(...)	
(...)	(...)	(...)	(...)	(...)	

1.11.3 Approval Process of changes not requiring prior approval

145.A.70(a)10; 145.A.85(c); GM1 145.A.15(b)

☐ Definition/scope of changes not requiring prior approval. This definition has to be agreed with the allocated inspector and formalised in the table included in the MOE 1.11.2 (column 5).

☐ Internal process followed to get the approval from the authorised person;

☐ The person responsible for the internal approval of documents (ref. MOE 1.11.2 table column 4)

☐ When the documents become valid

Generally, the document becomes valid immediately after internal approval by the maintenance organisation

¹⁴ when the organisation develops several associated procedures (e.g. Tools calibration procedure, Alternative tools procedure, Components storage, personnel training, HF procedure, workshop production planning, critical maintenance tasks, etc.) those procedures shall be gathered into a single Associated Procedures Manual to ease and speed up the approval process by the competent authority.

1.11.4 Notification of changes not requiring direct approval.

The allocated inspector shall be given access to any document not requiring direct approval. This objective can be achieved in various means, according to the following criteria:

- ☐ Option 1 - Document provided by the organisation using file transfer (e.g. mail, data transfer, etc.)
The organisation shall notify the assigned inspector of any document approved under this procedure as soon as practicable requesting an acknowledgment receipt which is only intended to exclude possible communication problems.
- ☐ Option 2 - Continuous access to the latest document through the organisation IT_
When a continuous access to the latest document through any IT system is given by the organisation to the assigned inspector and subject to this continuous access being specified in this paragraph (refer to example in the table par 1.11. 2 column 6), the organisation does not have to notify the assigned inspector of any document approved under this procedure. However, before each on-site audit (or any time upon request) the inspector shall be provided:
 - (a) The latest revision of the document, whenever this is technically possible, or;
 - (b) If the above is not possible (e.g. the document is in a format which cannot be downloaded such as a database for certifying staff), the organisation shall provide an electronic printout with revision and date.

1.12 Procedures for alternative means of compliance.

145.A.120(a);145.A.120(b); GM1 145.A.120

This chapter is optional and intended to describe the possibility to apply for an alternative means of compliance.

Such option is to be based upon the ability of the Compliance Monitoring to deal adequately with the Part-145 requirements..

While organisations are encouraged to follow the published DCA AMCs and GMs, and there is a presumption that this would meet compliance with the applicable requirements, organisations may choose to propose, and use, subject to approval by the competent Authority, alternative means of compliance.

- ☐ procedure for assessing AltMoC definition of scope and objectives
- ☐ identification of the applicable requirements affected and demonstration of compliance with these
- ☐ identification of the person responsible for AltMoCs
- ☐ Procedure to apply for an alternative means of compliance

The application for an AltMoc is to be issued with an DCA Form 2. Any AltMoc shall be approved by DCA with the approval of the Exposition including the listed AltMoc in chapter 5.5 .

- ☐ Procedure for monitoring the effectiveness of AltMoC Cross-reference to documents affected

PART 2 – MAINTENANCE PROCEDURES.

2.1 Supplier Evaluation and Subcontract Control Procedure.

145.A.205(a)(1); 145.A.205(a)(2); 145.A.205(b); 145.A.42(b)(i)/(ii)/(iii), GM2 145.A.42(b)(i), GM3 145.A.42(b)(i)145.A.75(b), AMC1 145.A.75(b), GM1 145.A.205; GM2 145.A.205; GM3 145.A.42(b)(i);

2.1.1 Type of Providers.

The use of the following terms is made in this paragraph to standardize the nomenclature for the possible various providers of components/parts/materials and providers of maintenance services..

PROVIDER	<p>Any source of components, material, maintenance services external to the maintenance organisation. Any provider may fall in one of the following category:</p> <ul style="list-style-type: none">• SUPPLIER• CONTRACTED ORGANISATION• SUBCONTRACTED ORGANISATION
SUPPLIER	<p>Any source providing components, standard parts or materials to be used for maintenance. Possible sources could be: Part-145 organisations, Part-21 Subpart G organisations, operators, distributors, brokers, Part-M Subpart F organisations, aircraft owners, etc.</p> <p>The list of suppliers is not considered an MOE associated list and can be managed under direct control of the Quality Department.</p> <p>The term “supplier” used in this chapter excludes the suppliers of tools and tools calibrations services which shall be described and referred in the MOE chapter 2.4.</p>
CONTRACTED ORGANISATION	<p>An DCA Part-145 maintenance organisation that carries out maintenance under its own approval for another approved maintenance organisation</p> <p>The list of contracted organisations shall be included in the MOE chapter 5.4.</p>
SUBCONTRACTED ORGANISATION	<p>An organisation, not itself appropriately approved to Part-145 that carries out aircraft line maintenance or minor engine maintenance or maintenance of other aircraft components or a specialised service as a subcontractor for an organisation appropriately approved under Part-145, as per 145.A.75.(d)</p> <p>The list of subcontracted organisations shall be included in the MOE chapter 5.2</p>

- ☐ Definition of Suppliers of materials, standard parts, components
 - Sources of supplies (e.g. constructor, original manufacturer (OEM), distributor approved by the manufacturer, retailer, airline, ...)
 - Types of supplies (e.g. components, consumables, standards, materials, ingredients, etc.)
- ☐ Definition of Contracted organisations
 - Sources of services (e.g. DCA Part-145 approved maintenance organisation and related approved ratings)
 - Types of services (e.g. specialised work, line maintenance, component maintenance, etc.)
- ☐ Definition of Subcontracted organisations
 - Sources of services (non- Part-145 approved organisation and related qualification)
 - Types of services (e.g. specialised work, line maintenance, component maintenance, etc.)

2.1.2 Supplier Evaluation.

Detailed guidance for suppliers evaluation is provided in Part-145 guidance material. The use of suppliers which are certified to officially recognised standards does not exempt the organisation from its obligation to ensure supplied components and material are in satisfactory conditions and meet the applicable criteria of Part-145 regulation. Supplier evaluation may depend on different factors, such as the type of component, whether or not the supplier is the manufacturer of the component, the TC holder or a maintenance organisation, or even specific circumstances such as aircraft on ground. This evaluation may be limited to a questionnaire from the Part-145 organisation to its suppliers, a desktop evaluation of the supplier's procedures or an on-site audit, if deemed necessary

☐

Initial approval of each type of the supplier:

- Selection processes;
- Internal acceptance process;
- Issuance of the internal authorisations (e.g. scope of authorisation, validity, ...);
- Producing the list of suppliers;
- Internal distribution of the list – access / authorisation of computerized list

☐

Monitoring of the lists of each type of supplier versus internal authorisation:

The list of suppliers shall be managed under the control of the Quality Department.

- Incoming inspection results, audit results, possible internal limitation
- Assessment of the service provided
- Updating of the list
- Withdraw of the internal authorisation, when applicable Management of the purchase orders

☐

according to the approved suppliers. Records of suppliers information:

☐

- Files;
- Duration / location;
- Type of documents (Certificates, audit reports, incoming inspection results, ...)

2.1.3 Monitoring the Contracted Organisations.

A process similar to the case of monitoring the suppliers may be adopted.

☐

Initial approval of each contracted organisation

☐

Monitoring of the lists of each type of contracted organisation versus internal authorisation (refer to MOE 5.4);

☐

Management of the purchase orders according to the approved contracted organisation; Records of contracted organisations information;

☐

2.1.4 Monitoring Subcontractors.

☐

Initial approval of each subcontractor;

- Pre-audit before approval and inclusion in the internal audit plan;
- Approved maintenance organisation expertise and procedures to control the sub-contractor;
- Supervision of the inspection and release from the sub-contractor;
- Contract to allow access of DCA to the sub-contractor.

☐

Monitoring of the lists of each type of subcontractors versus internal authorisation (refer to MOE 5.2);

☐

Management of the purchase orders according to the approved subcontractors;

☐

Records of subcontractors information;

2.2 Acceptance / Inspection of Aircraft Components and Materials and installation.

145.A.42(a)(i)/(ii)/(iii)/(iv)/(v), 145.A.42(b)(i)/(ii)/(iii)/(iv), AMC1 145.A.42(a)(i), AMC1 145.A.42(a)(ii), AMC1 145.A.42(a)(iii), AMC1 145.A.42(a)(iv), AMC2 145.A.42(a)(iv), AMC1 145.A.42(a)(v), AMC1 145.A.42(b)(i), GM1 145.A.42(b), GM1 145.A.42(b)(i), GM1 145.A.42(b)(ii), AMC1 145.A.42(a)(i); GM 145.A.42(a)(i)

This paragraph shall describe the procedures for receiving components, parts, materials incoming from outside the organisation, such as for example from suppliers, contracted organisations, etc.

2.2.1 Classification and Definitions

- ☐ Serviceable components
- ☐ Unserviceable components
- ☐ Standard parts
- ☐ Raw and Consumable material
- ☐ Unsalvageable components

2.2.2 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.

“EXAMPLE”



New Parts

STATUS “NEW”	
type of part/material	document to be expected
standard parts	Option 1: when the part/material is purchased directly from the manufacturer, the Certificate of Conformity issued by the manufacturer is expected;
materials (raw materials and/or consumables)	Option 2: when the part/material is purchased thru a third party supplier (e.g. distributor, operator, maintenance organisation, etc.) the documentation accompanying the part/materials shall contain: <ul style="list-style-type: none">• Conformity certification to the part/material applicable standard/specification, and;• identification of the manufacturing source, and;• Identification of the supplier source. For Option 2, the information above may be included in one single Certificate of Conformity (CoC) issued by the supplier (containing cross reference to the manufacturer CoC) or be composed by more documents, such as for example the CoC issued by the manufacturer plus a statement from the supplier source. In any case, the manufacturer CoC shall be made available upon request.

aircraft parts	<p>Option 1: DCA Form 1;</p> <p>Option 2: DCA Form 1 equivalent release documents for new parts, such as for example (not exhaustive): “EXAMPLE”</p> <ul style="list-style-type: none"> • EASA Form 1 with status “new” • FAA Form 8130-3 with status “new” ; • TCCA Form One with status “new”; <p>Option 3: Components which do not need an DCA Form 1 as per 145.A.42(a)(i), which further refers to Part-21 21.A.307 specifies the new components that do not need an DCA Form 1 to be eligible for installation and the conditions for the document accompanying the component.</p>
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☐ Used Parts

STATUS “USED”	
type of part/material	document to be expected
aircraft parts	<p>Option 1: DCA Form 1; <i>Note: Used components maintained by a CAO appropriately approved for component maintenance and released on an DCA Form 1 cannot be installed on complex motor-powered aircraft or aircraft used by licensed air carriers</i></p> <p>Option 2: DCA Form 1 equivalent release documents for used parts, such as for example (not exhaustive): “EXAMPLE”</p> <ul style="list-style-type: none"> • EASA Form 1 for an used part (e.g. overhauled) in compliance with applicable requirements and traceability • FAA Form 8130-3 for a used part (e.g. overhauled) issued by an DCA approved organisation located in the USA with “dual release”: both boxes in block 14a are to be ticked and the DCA release statement together with the DCA approval number are detailed in the remarks block. • TCAA Form One for a used part (e.g. overhauled) issued by an DCA approved organisation located in Canada with “dual release”: both boxes in block 14a are to be ticked and DCA approval number detailed in the remarks block

	Option 3: For components which do not need an DCA Form 1 a "declaration of maintenance" is required as specified in 145.A.42(a)(i) and related AMC
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Depending on the type of components, the organisation shall additionally describe the specific requirements applicable to PMA parts, Life Limited parts, used parts, etc.

Additional cases may apply as per 145.A.42(b)(iv), when applicable to the scope of work of the organisation.

2.2.3 Receiving inspection procedure.

- ☐ Receiving inspection For Components / Materials/ Standard Parts received from external sources:

The procedures for acceptance of components, standard parts and materials shall have the objective of ensuring that the components, standard parts and materials are in satisfactory condition and meet the organisation's requirements. These procedures shall be based upon incoming inspections.

- ☐ physical inspection of components, standard parts and/or materials;
 - verify the general condition of components and their packaging in relation to damages that could affect the integrity of the components;
 - verify that the shelf life of the component has not expired;
 - verify that items are received in the appropriate package in respect of the type of component: e.g. correct ATA 300 or electrostatic sensitive devices packaging, when necessary;
 - verify that the component has all plugs and caps appropriately installed to prevent damage or internal contamination. Care shall be taken when tape is used to cover electrical connections or fluid fittings/openings because adhesive residues can insulate electrical connections and contaminate hydraulic or fuel units.
 - Materials/standard parts received in batches and related traceability (e.g. split of batches): Items (fasteners, etc.) purchased in batches should be supplied in a package. The packaging shall state the applicable specification/standard, part number, batch number and the quantity of the items. The documentation accompanying the material shall contain the applicable specification/standard, part number, batch number, supplied quantity, and the manufacturing sources. If the material is acquired from different batches, acceptance documentation for each batch shall be provided.
- ☐ review of accompanying documentation and data
 - 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)
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
- ☐ Components received in AOG (these parts are normally received directly at the AOG location and dedicated procedures need to be in place).

- ☐ Receiving 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
- ☐ Internally fabricated parts
- ☐ Components removed serviceable from aircraft.

☐ Procedure of treatment of a suspected unapproved part « bogus part »

- ☐ Identification
- ☐ Record
- ☐ notification to the Authority
- ☐ Form used (e.g. refer to the MOE 2.18 occurrence reporting procedure/form)
- ☐ notification address to DCA

2.2.4 Installation of components/standard parts/materials

☐ Procedure for verification prior to installation of components/standard parts/materials

Components, standard parts and materials shall only be fitted when specified in the applicable maintenance data. This could include parts catalogue (IPC), service bulletins (SB), aircraft maintenance manual (AMM), etc. So, the installation of a component, standard part and material can only be done after checking the applicable maintenance data.

This check shall ensure that the part number, modification status, limitations, etc., of the component, standard part or material are the ones specified in the applicable maintenance data of the particular aircraft or component (i.e. IPC, SB, AMM, CMM, etc.) where the component, standard part or material is going to be installed. The organisation shall establish procedures to ensure that this check is performed before installation

- ☐ verification the applicable maintenance data specifies the particular component, standard part or material
- ☐ verification of satisfactory condition and appropriate document for installation
- ☐ verification that, a component is eligible to be fitted when different modification and/or airworthiness directive configuration may be applicable
- ☐ verification prior to installation of standard parts on an aircraft or component (e.g. traceability, applicable standard as per maintenance data requirement)
- ☐ verification prior to use any raw or consumable material on an aircraft or component (e.g. due dates, applicable specification as per maintenance data requirement)
- ☐ verification for components which do not need an DCA Form 1 as per 145.A.42(a)(i)

the design approval holder may have included in the instructions for continued airworthiness specific verification activities to be conducted by the installer of the part or appliance.

2.3 Storage, Tagging and delivery of Components to maintenance.

145.A.25(d), AMC 145.A.25(d), 145.A.42(a), AMC1 145.A.42(a)(i), AMC1 145.A.42(a)(ii), AMC1 145.A.42(a)(iii), AMC1 145.A.42(a)(iv), AMC2 145.A.42(a)(iv), AMC1 145.A.42(a)(v), 145.A.42(c), AMC1 145.A.42(c), GM1 145.A.42(c)(i),

2.3.1 Storage Procedures

- ☐ Procedures for maintaining satisfactory storage conditions according to manufacturer's recommendation for:
 - ☐ aircraft components;
 - ☐ consumable, raw material
 - ☐ Special storage requirements (condition and limitation) e.g.: ESD sensitive devices, rubber.
 - ☐ Flammable fluids
 - ☐ Engines
 - ☐ Bulky assemblies
 - ☐ Record of position in the store (s)

- ☐ Segregation between serviceable, unserviceable unsalvageable

Unserviceable components shall be identified and stored in a secure location under the control of the maintenance organisation until a decision is made on the future status of such components.

- ☐ System and procedure to control shelf life / Life limit and modification standard.

- ☐ Access to storage facilities restricted to authorised personnel

2.3.2 Tagging

- ☐ Procedures for Tagging / labelling components/standard parts/materials
 - ☐ Serviceable components
 - ☐ Unserviceable components

The unserviceable status of the component shall be clearly declared on a tag together with the component identification data and any information useful to define actions necessary to be taken. Such information shall state, as applicable, in-service times, maintenance status, preservation status, failures, defects or malfunctions reported or detected exposure to adverse environmental conditions, and if the component was installed on an aircraft involved in an accident or incident. Means shall be provided to prevent unintentional separation of this tag from the component.

- ☐ Standard parts
- ☐ Raw and Consumable material
- ☐ Unsalvageable components
- ☐ Mutilation before disposal

Mutilation shall be accomplished in such a manner that the components become permanently unusable for their original intended use. Mutilated components should not be able to be reworked or camouflaged to provide the appearance of being serviceable, such as by re-plating, shortening and rethreading long bolts, welding, straightening, machining, cleaning, polishing, or repainting.

When in agreement with the component owner, the component is disposed of for legitimate non-flight uses, such as training and education aids, research and development, or for non-aviation applications, mutilation may not be appropriate. In such case, the component may be marked indicating that it is unsalvageable, or the original part number or data plate information can be removed or a record kept of the disposition of the component.

- ☐ records of components with mandatory life limitations or other critical components scrapped/mutilated and information provided to original manufacturer
- ☐ Quarantine

2.3.3 Release to the maintenance process

*The release document expected for components/standard parts/materials are described in **MOE chapter 2.2***

- ☐ Issue of components, standard parts and materials, to the maintenance process (control, identification, batch segregation)

2.4 Acceptance of Tools and Equipment.

145.A.40(a)i, AMC 145.A.40(a), 145.A.40(b), AMC 145.A.40(b)

This chapter shall 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, ...)
 - ☐ Records

- ☐ Incoming inspection for tools
 - ☐ Required documentation
 - ☐ Compliance with order / condition
 - ☐ "Quarantine" procedure
 - ☐ Internal identification
 - ☐ Verification of necessary control / calibration

- ☐ Monitoring of tool service providers
 - ☐ Selection process
 - ☐ internal authorisation process
 - ☐ Monitoring of the internal authorisations (e.g. scope of authorisation, validity, ...)
 - ☐ Withdrawal of the internal authorisation
 - ☐ List of tools service providers

A list of tools service providers (inspection /servicing/ calibration) has to be established. The list:

- *is not considered an MOE associated list and can be managed under direct control of the Quality Department.*
- *should be normally kept distinguished from the list of suppliers of materials, standard parts and components used in the maintenance process which is referred in the MOE 2.1. However the two lists may be also combined provided that the "suppliers" as defined in MOE 2.1 are clearly distinguished from the "tool service providers".*

2.5 Calibration of Tools and Equipment.

145.A.40(b), AMC 145.A.40(b)

This chapter shall describe all the procedures related to the controls, revisions, modifications, 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
- ☐ Procedure for tools found out of tolerance during calibration (e.g. feedback to production, safety assessment, process to identify affected components/products and to inform the customer/operator for further actions in case of safety concerns, etc.)

2.6 Use of Tooling and Equipment by Staff (including alternative tools).

145.A.40(a)i, 145.A.40(a)ii, AMC 145.A.40(a), 145.A.40(b), AMC 145.A.40(b), AMC 145.A.45(d)

This chapter shall describe all management procedures for tooling, distribution and return of the tooling after use.

- ☐ Distribution of tools
 - ☐ record of user
 - ☐ location of use
- ☐ Determining tool serviceability prior to issue.
- ☐ Training and control of personnel in the use of tools and equipment (records of training). Personal (own)
- ☐ instrument / tool control.
- ☐ Loan tool control and audit. 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
 - ☐ 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)
 - ☐ 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 Procedure for controlling working environment and facilities.

145.A.25(d), AMC 145.A.25(d), AMC 145.A.47(a); 145.A.60(a)

- ☐ 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

- ☐ Environmental control of working environment

Guidance on the effects of environmental factors in maintenance can be found in ICAO Doc.9824 Human Factors Guidelines for Aircraft Maintenance Manual.

2.8 Maintenance data and Relationship to Aircraft / Aircraft Component Manufacturer's Instructions including Updating and Availability to Staff.

145.A.45.(a), 145.A.45.(b)1, 145.A.45.(b)2, 145.A.45.(b)3, 145.A.45(b)4, 145.A.45(b)5, 145.A.45(d), 145.A.45(e), 145.A.45(f), 145.A.45(g), AMC 145.A.45(d), AMC1 145.A.45(e), AMC 145.A.45(f), AMC1 145.A.45(g)

This chapter shall describe the management of all the technical documentation in use within the Organisation. It shall clearly identify the various types of documentation in use (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 identified in the paragraphs below.

2.8.1 Maintenance Data Coming from External Sources.

This paragraph needs to identify the applicable Maintenance data in use coming from external sources. Maintenance data may have been prepared by various organisations, but in any case it needs to be issued by, referenced by, or acceptable to the organisation responsible for the design in accordance with Part 21 (e.g. type certificate holder (TCH), supplemental type certificate holder (STCH), ETSO holder, repair design approval holder).

The maintenance instructions published by the component manufacturers may be considered acceptable to the DAH – and hence may be used as maintenance data for maintenance on components approved for installation by the DAH – when they are referenced as additional or optional maintenance information together with the ICA, or when documented by a list by that DAH.

- ☐ Control of Maintenance data obtained directly from the author (ADs, SBs, SIL, CMM, AMM, ESM, etc.)
 - ☐ Subscriptions control
 - ☐ Technical library
 - ☐ Issue / amendment control
- ☐ Control of customer supplied maintenance data
- ☐ Procedure to ensure all applicable maintenance data is readily available for use when required by maintenance personnel

In the case of an Initial or Change of an DCA Part-145 approval for Cx ratings, the AMO shall demonstrate having direct access to the TCH/OEM maintenance data. This means:

- (a) The AMO has a subscription for the maintenance data directly with the TCH/OEM, or;*
- (b) In the case of operator/customer provided data, the AMO has direct access to TCH/OEM to verify the revision status of the documentation provided by the customer (e.g. typical example would be that the TCH/OEM provides this information freely available in its website). In addition, the conditions specified below apply:*
 - 1. A contract shall be in place detailing the responsibilities for ensuring the availability, the update of the maintenance data from the customer/operator and formal authorisation for the use of such data;*
 - 2. The maintenance data is available at the time of the audit by DCA;*
 - 3. the MOE 1.9 is limited as necessary (to the specific customer/operator) and a notification is done according to MOE 1.10 when the contact is terminated/cancelled because this may affect directly the approval*

2.8.2 Documentation/Maintenance Instructions Issued by the maintenance organisation.

This procedure shall describe the various types of maintenance instructions which may be developed by the maintenance organisation starting from the maintenance data (e.g. AMM, CMM, etc.).

It has to be noted that the MOE 2.13 chapter shall only describe the templates and their use in the maintenance process, while the MOE 2.8 is intended to cover the procedure on how to ensure that maintenance data are correctly transcribed into work instructions.

Specific instructions from manufacturer maintenance data related to CDCCL shall be considered.

- ☐ Modification of maintenance instructions by the organisation, if applicable;
- ☐ Maintenance instructions issued in conformity to approved data in order to facilitate/customize the maintenance (e.g. work card/work sheet, engineering orders, technical specifications, etc.) as applicable
 - ☐ paper or computer generated work cards and related amendment control
 - ☐ qualification requirements for staff involved in preparation/approval of work cards/work sheets, etc.
 - ☐ Incorporation of best practice and human factors principles:
 - ☐ Complex or long maintenance tasks subdivided into clear stages to allow recording what was actually accomplished by each individual
 - ☐ differentiation of disassembly, accomplishment, reassembly, testing tasks
 - ☐ compliance and traceability with FTS/CDCCL instructions

'complex or long maintenance tasks' refers to tasks involving multiple disciplines or multiple shifts, or multiple zones/access opening, special tools etc., or a combination of theses. The stages into which the work cards are to be subdivided should refer to where work can be interrupted. Subdivision should also indicate when a different discipline continues to work if no separate work cards are provided.

- ☐ Documentation issued for internal information purposes (e.g. quality information bulletins, quality alerts, occurrence investigation reports, etc.) as applicable;
 - ☐ procedure to ensure awareness by the staff
- ☐ Control of information
 - ☐ Technical library
 - ☐ Issue / amendment control
 - ☐ Distribution: access to the staff

2.9 Acceptance, coordination and performance of repair works.

145.A.45(a), 145.A.48(c)(4), AMC 145.A.50

This chapter is intended to describe how the organisation is performing repairs on aircraft/components/engines according to already available maintenance data and how is managing the repairs not described in the manufacturers' documentation.

It has to be noted that the privilege given to develop modified maintenance instructions (as described in previous MOE chapter 2.8), is excluding the engineering design of repairs and modifications.

- ☐ Repairs according to already available maintenance data
 - ☐ Repairs In accordance with AMM, SRM, CMM or other maintenance data published by the TCH, STCH, etc.
 - ☐ Repairs already approved by organizations from State of Design Part 21 DOA or POA.
 - ☐ Internal process in use and forms to manage the repairs
- ☐ Repairs requiring a new approval (not already included in the available maintenance data)
 - ☐ Sources of repair approval (e.g.: organizations from State of Design Part 21 DOA, POA, etc.)
 - ☐ Acceptance of Minor/major repairs approvals (it is recommended to develop a table listing the various cases, including the acceptance of repairs under bilateral agreements)
 - ☐ Work order
 - ☐ internal process in use and forms to manage the repairs
 - ☐ Maintenance instruction (job cards,...)
- ☐ Control of the scope of work versus the requested repair (limitations and conditions).
- ☐ acceptance of standard change and standard repair, if applicable to the scope of work (this procedure is only applicable to airplanes of 5700 Kg MTOM or less, rotorcraft of 3175 Kg MTOM or less and sailplanes, powered seaplanes, balloons and airships).

2.10 Acceptance, coordination and performance of scheduled maintenance works.

AMC1 145.A.50(b).

This procedure is primarily applicable for maintenance under Ax ratings in relation to establishing compliance with the operator's maintenance programme. However it can also be adopted for maintenance under Bx and Cx ratings when necessary to clarify the terms under which scheduled maintenance is to be defined for an engine or component starting from the work order received from the customer.

A procedure is to be included, with intent to explain how the maintenance organisations ensures the operator's maintenance programme is taken into account to comply with the contract for aircraft maintenance. Additional guidance can be found in Appendix XI to AMC M.A.708(c) contracted maintenance.

- ☐ Identification of the maintenance programme under which the maintenance has to be carried out
- ☐ Maintenance programme access by the maintenance organisation as part of the work order/contract
- ☐ Procedure to ensure a CRS is done in compliance with the approved operator's maintenance programme (this procedure may cross-refer to the [MOE 2.16 chapter](#))

The certificate of release to service should relate to the task specified in the (S)TC holder's or operator's instructions or the aircraft maintenance programme which itself may cross-refer to maintenance data.

Deviations from the maintenance programme and related approval by the competent authority of the operator is intended to be described in the [MOE chapter 3.15](#).

2.11 Acceptance, coordination and performance of Airworthiness directives

145.A.45(b)2, 145.A.42(b)(ii), GM1 145.A.42(b)(ii), GM1 145.A.50(a)

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

It is necessary to make a difference between the activities of management / launching of ADs on behalf of the customers and the one carried under the Part-145 approval.

Only the AD related activities which concern the Part-145 approval have to be described in the MOE, with particular reference to the following points.

- ☐ Identification of the responsibilities of the maintenance organisation with regards to Airworthiness directives, such as but not limited to establishing compliance with the following:

It is considered a good maintenance practice to have a procedure in place to review ADs as applicable to the scope of approval.

- ☐ procedure for control of ADs applicable to components in the store(s) of the maintenance organisation
 - *When the airworthiness control is directly ensured by the owner/operator, the maintenance organisation shall demonstrate that a contract is in place, attributing the responsibilities related to the ADs to such owner/operator. This also applies to component(s) directly delivered by the operator to the line stations;*
 - *When the maintenance organisation retains control of the airworthiness status of the component(s) (e.g. the maintenance organisation owns the component), the maintenance organisation shall ensure that all applicable ADs are embodied to the parts they have in store. The maintenance organisation shall employ qualified staff for the AD analysis, issuing internal work orders, performing the AD compliance follow-up*

- ☐ procedure to hold and use applicable current airworthiness directives (e.g. ordered by the customer, needed for the control of components in store, etc.)

- ☐ access to the relevant ADs

This procedure may also refer to a procedure included MOE chapter 2.8 endorsing this requirement

- ☐ verification that, prior to installation on an aircraft, a component is eligible to be fitted when different airworthiness directive configuration may be applicable

This procedure may also refer to a procedure included MOE chapter 2.2 endorsing this requirement

- ☐ procedure to ensure that a CRS is not issued in case of any non-compliance which is known to endanger flight safety (e.g. overdue AD known by the maintenance organisation, etc.)

This procedure may also refer to a procedure included MOE chapter 2.16 endorsing this requirement

- ☐ Accomplishment of Aircraft/components/engines ADs / work orders specifying the status of the document to be used
- ☐ Awareness of the mandatory character of the associated maintenance data
- ☐ Identification of the mandatory requirement in the maintenance documentation

2.12 Acceptance, coordination and performance of modification works.

145.A.45(d), 145.A.48(c)(4), AMC 145.A.45(d), GM1 145.A.48(c)(4)

This chapter shall refer to the optional modifications to be embodied on the aircraft/components/engines, under the

Part-145 approval

The follow up of the Optional Modification is the responsibility of the operator who must ask their enforcement on the work order sent to the maintenance organisation.

Only the activities above which concern the Part-145 approval have to be presented in the MOE.

It has to be noted that the privilege to develop modified maintenance instructions (as described in previous MOE chapter 2.8), is excluding the engineering design of repairs and modifications.

Maintenance procedures shall be established to ensure that damage is assessed and modifications and repairs are carried out using data specified in 145.A.48(c)(4).

- ☐ Company policy
 - ☐ Sources of modification approval (DCA Part 21 DOA, TC Holder¹⁶, or DCA)
 - ☐ embodiment of modifications, including the case of STCs
- ☐ Control of the scope of work (limitations and conditions)

2.13 Maintenance documentation development, completion and sign-off.

145.A.45(g), 145.A.45(e), 145.A.45(f), 145.A.55(a)(1)(1), GM 145.A.55(a)(1)(1), M.A.201(c), GM1 145.A.48

It is recommended to structure this chapter in different separate paragraphs as indicated below with clear differentiation between each individual rating in the scope of work (e.g. aircraft, engines, components, specialised services).

2.13.1 Templates in use to record maintenance.

This procedure shall identify the process of issuing and updating all the various templates in use by the maintenance organisation to record maintenance, such as work sheets, job cards, non-routine cards, deferred items, etc.

With regards to job cards and work sheets the MOE 2.13 chapter shall only describe the templates and their use in the maintenance process, while the MOE 2.8 is intended to cover the procedure on how to ensure that maintenance data are correctly transcribed into work instructions.

- ☐ Identification of the templates in use to record maintenance

*This procedure may refer to the **MOE chapter 5.1** where the forms and templates in use by the maintenance organisation are included*

- ☐ Analysis and implementation of Manufacturer data revisions Initial approval and revision of the template

2.13.2 Composition of the work package

This procedure shall describe the composition of a standard work package as applicable to the scope of work of the organisation (e.g. for aircraft maintenance will be routine work cards, non-routine cards, ADs, SBs, MEL, deferred items, tally sheet, maintenance release certificate, etc.)

- ☐ 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

2.13.3 Completion of Maintenance Documentation.

*This procedure shall describe the completion of each of the documents identified in the previous paragraph. This may be done by reference to **MOE chapter 5.1** where the related sample document is included together with its related filling instructions.*

- ☐ Process of declaring a task not applicable including conditional tasks
- ☐ Process of recording test results and dimensions
- ☐ 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
- ☐ Process to correct a maintenance record imperfectly/incorrectly entered during the performance of maintenance. This cannot obviously be done after CRS issuance
- ☐ Worksheet / work card completion and maintenance / independent inspection sign-off
 - ☐ procedure to ensure correct completion of customer provided work cards (e.g. training on customer paperwork, etc.)
- ☐ Use of personal stamps

☐ Sign-off policy: summary table for tasks sign-off¹⁷

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

The sign-off policy is established to assign clear responsibilities for the performance of maintenance tasks, even when a task may be signed-off by more than one person (e.g. additional inspection) or it is signed-off based on tasks carried out by a contracted or subcontracted organisations.

Any person performing maintenance shall be responsible for the tasks performed. A task can only be signed-off by “authorised personnel”¹⁸.

The use of a sign-off summary table is recommended which shall be consistent to the procedures in MOE 2.25.1 “Procedure to minimise the risk of multiple errors and preventing omissions” and to the job descriptions identified within the maintenance organisations (e.g. certifying staff/support staff in MOE 3.9, mechanics in MOE 3.14, qualifying inspectors in MOE 3.13, etc.).

“EXAMPLE”

Type of task	task sign-off by “authorised personnel”	aircraft/ component/ engine release to service
Normal task	authorised person for the task performance (e.g. mechanic, C/S) or Trainee + authorised person for the task performed under supervision (e.g. C/S, inspector)	Certifying staff ¹⁹
	authorised person for the task performance (e.g. C/S, mechanic) + authorised person for the independent inspection (e.g. C/S, inspector) or Trainee + authorised person for the task performed under supervision (e.g. C/S, inspector) + authorised person for the independent inspection (e.g. C/S, inspector)	
Critical Maintenance task (e.g. one engine installation, one flight control rigging, etc.) with error capturing method ²⁰ of Independent inspection		
Critical or identical maintenance task (limited to unforeseen circumstances when only one person is available) (e.g. dual engine oil uplift, replacement of both cabin pressure controllers on one aircraft, etc.) with error capturing method of re-inspection	authorised person for the task performance (e.g. mechanic, C/S) + additional record of re-inspection by the same authorised person	
.....	

¹⁷ A “sign-off” is a statement by the competent person performing or supervising the work, that the task or group of tasks has been correctly performed. A sign-off relates to one step in the maintenance process and is therefore different from the release to service of the aircraft

¹⁸ “Authorised personnel” means personnel formally authorised by the maintenance organisation approved under Part-145 to sign-off tasks.

“Authorised personnel” are not necessarily “certifying staff”.

¹⁹ In the case of aircraft base maintenance, B1, B2, B3 Support Staff, as applicable, shall ensure that all relevant tasks or inspections have been carried out to the required standard before the category C certifying staff issues the certificate of release to service

²⁰ Refer to MOE 2.23 and 2.25 for the definition of error capturing methods (and priority criteria), critical and identical maintenance tasks

2.14 Technical Records Control.

145.A.55(a)(1), 145.A.55(a)(2); 145.A.55(a)(3); 145.A.55(a)(4); GM1 145.A.55(a)(1), AMC1 145.A.55(a)(3)

- ☐ Composition of maintenance records retained by the maintenance organisation
 - ☐ CRS copy as applicable to aircraft/engines/components/NDT ratings (e.g. ATL, base maintenance release, DCA Form 1)

In the case of aircraft base maintenance copy of the base maintenance release certificate plus the associated CRS in the aircraft technical logbook system shall be kept on records by the maintenance organisation.

- ☐ copy of any detailed maintenance record associated with the work carried out
- ☐ Release documents of components, standard parts installed and consumable/ raw materials used

Where the release documents are not included in the maintenance records the organisation shall demonstrate traceability is available in the maintenance records to the release documents and that they can be retrieved at any time for all the period to which the records retention requirements apply.

In the case of release documents related to aircraft components, the customer/operator agreement is necessary where those documents are only traceable but not included in the maintenance records provided to the customer/operator.

- ☐ Format of the maintenance records
 - ☐ Paper and/or;
 - ☐ Computer system and related backup
- ☐ Records storage conditions (fire extinguisher system, fire detection,) and retrieval of records (paper or computer based)

Computer record systems should have at least one backup system, which should be updated within 24 hours of any new entry. Computer record systems should include safeguards to prevent unauthorised personnel from altering the data. All computer hardware that is used to ensure the backup of data should be stored in a different location from the one that contains the working data, and in an environment that ensures that the data remains in good condition. When hardware or software changes take place, special care should be taken to ensure that all the necessary data continues to be accessible through at least the full period specified in the relevant provision.

- ☐ Control of access to records (paper and / or computer based records)
- ☐ Lost or destroyed records (reconstruction and DCA acceptance). *This procedure shall only be proposed to DCA in case of actual need raise.*
- ☐ Retention of records
 - ☐ Periods
 - ☐ Methods and security

Minimum records retention period is three years.

- ☐ commitment that all retained maintenance records covering the last three years shall be distributed to the last owner or customer of the respective aircraft or component in case the maintenance organisation terminates its operation.

2.15 Rectification of Defects Arising During Maintenance.

145.A.50(c), 145.A.50(e); AMC1 145.A.50(e);

This procedure is applicable to any rating and intended to describe how new defects or incomplete maintenance work orders identified during maintenance shall be brought to the attention of the customer/operator for the specific purpose of obtaining agreement to rectify such defects or completing the missing elements of the maintenance work order. In the case where the customer declines to have such maintenance carried out, 145.A.50(e) is applicable in order to issue the release to service (with incomplete/deferred maintenance), as addressed in MOE chapter 2.16

- ☐ Procedure to record defects arising during maintenance Analysis of defects and rectification
- ☐ Notification process (when necessary) to the customer/operator, manufacturer and authority
- ☐ Report to the operator/ approval of the customer to launch the rectification according to the contract

2.16 Release to Service Procedure.

145.A.30(g), 145.A.30(h)1, 145.A.30(h)2, 145.A.30(i), 145.A.30(j)5, AMC1 145.A.30(j)(5), AMC1 145.A.30(j)(5)(i), AMC1 145.A.30(j)(5)(ii), 145.A.48(c)(3)(1), 145.A.48(b), 145.A.50(a), GM1 145.A.50(a), 145.A.50(b), 145.A.50(c), 145.A.50(e), 145.A.50(d), 145.A.50(f), AMC1 145.A.50(b), AMC1 145.A.50(d), AMC2 145.A.50(d), GM 145.A.50(d), AMC1 145.A.50(e), AMC1 145.A.50(f), AMC1 145.A.48(a), 145.A.48(c)(5), 145.A.35(a), 145.A.55(a)(1)(1), 145.A.75(e), 145.A.75(c), 145.A.30(j)3, 145.A.30(j)4, AMC1 145.A.30(j)(4), Appendix I

The maintenance organisation shall be responsible for the maintenance that is performed within the scope of its approval.

2.16.1 General requirements of the release to service

- ☐ Definition of the CRS statement
- ☐ 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)
 - ☐ The date such maintenance was completed
 - ☐ The location where the release to service is issued
 - ☐ The identity of the organisation, including the approval number of the maintenance organisation
 - ☐ the identity of the person issuing the release to service, including:
 - ☐ the DCA Part-145 C/S - S/S individual authorisation number (handwritten or stamped) of the certifying staff issuing such a certificate; and
 - ☐ the signature of the certifying staff issuing such a certificate (may include electronic signature system when approved by the competent authority)
 - ☐ The limitations to airworthiness or operations, if any.
- ☐ Cross-reference to work packs (initial work order, additional works, to ensure that all the tasks ordered have been performed)
- ☐ General verification carried out after completion of maintenance that the aircraft or component is clear of all tools, equipment and any extraneous part or material and that all access panels removed have been refitted
- ☐ Impossibility to sign a release certificate that could hazard flight safety e.g.:
 - ☐ AD ordered or know to be applicable which is overdue and not embodied
 - ☐ Works which were carried out not in accordance with approved data
 - ☐ Discrepancies that may have consequences on the airworthiness of the aircraft/ component/ engine
- ☐ Impossibility to sign a release certificate due to unexpected non-availability of facilities, equipment, tooling material, maintenance data or certifying staff
- ☐ Particular cases of issuance of CRS for aircraft/engine/component known to be in un-airworthy conditions: *This procedure is optional and should be only included in case of real need by the maintenance organisation. A CRS in the cases above might be issued as long as the incomplete maintenance/non airworthy condition is properly identified in the CRS statement and communicated to the customer/operator (and to DCA in case of disagreement between the maintenance organisation and the customer/operator on the possibility to issue such CRS)*
 - ☐ NDT inspections with defects outside limits

- ☐ Need to complete a maintenance work order which leaves the aircraft/engine/components in non-approved configuration (e.g. CRS of an aircraft where the maintenance organisation is only ordered to remove an engine)
- ☐ Need to issue a CRS for a maintenance check flight, where an STC has been incorporated which is not yet approved (e.g. parts installed in "prototype status", maintenance performed using data pending approval, etc.)
- ☐ The specificities of DCA Form 1. This procedure shall at least address the following issues:
 - ☐ The address to be recorded in the DCA Form 1 block nr. 4 is the address of the PPB which is reflected in the first page of the DCA Form 3 certificate. However, to allow the identification of the maintenance site where the DCA Form 1 is issued (in the case this is different from the PPB), the Organisation shall ensure a system is in place to retrieve the information of the maintenance site where the DCA Form 1 was issued, starting from the tracking number of the DCA Form 1 (block nr. 3)
 - ☐ The tracking numbering system of DCA Form 1 shall be described demonstrating a unique number is used;
 - ☐ An identification system shall enable to track the location where the maintenance has been released to service;
 - ☐ The recording system allowing to easily retrieve all the issued Form 1;
 - ☐ The cancellation or correction of an DCA Form 1 mistakenly completed/issued.

2.16.2 Aircraft maintenance release to service (Ax ratings).

- ☐ Issuance and completion instruction of CRS after Base Maintenance (e.g. Maintenance Release Certificate)
 - ☐ Responsibilities of the cat. C certifying staff
 - ☐ Responsibilities of the B1 / B2 support staff
- ☐ Issuance and completion instruction of CRS after Line Maintenance
- ☐ Issuance of a CRS with limitations/incomplete work within aircraft limitations as per approved data (e.g. maintenance organisation not in condition to complete all the maintenance ordered, deferred maintenance, need to perform a maintenance check flight*)

Only the authorised certifying staff, can decide, using maintenance data, whether an aircraft defect hazards seriously the flight safety and therefore decide when and which rectification action shall be taken before further flight and which defect rectification can be deferred. However, this does not apply when the MEL is used by the pilot or by the authorised certifying staff.

**Maintenance Check Flight (MCF): Certain maintenance data issued by the design approval holder (e.g. AMM) require that certain checks/tests are performed in flight as a necessary condition to complete the maintenance ordered. Within the approved aircraft limitations, a certifying staff should release the incomplete maintenance (taking into account the checks/tests to be performed in flight) before the flight on behalf of the maintenance organisation. After performing the flight and any additional maintenance necessary to complete the maintenance ordered, a certificate of release to service should be issued in accordance with 145.A.50(a). The aircraft operator retains the responsibility for the MCF and further guidance is available in GM M.A.301(i), about the various MCF scenarios, including in particular cases where a permit to fly may be necessary or where the maintenance organisation may rely on the crew performing the flight to make statements about in-flight verifications.*

- ☐ Temporary fitting an aircraft component without appropriate release certificate in AOG condition (e.g. 30 hours of flight, agreement of the customer, acceptable certificate, checking the status of the component, technical log record, corrective action when the aircraft returns to its maintenance base...).
- ☐ Release to service for components removed serviceable from aircraft
 - ☐ Issuance of an DCA Form 1 for components removed serviceable from a Mauritius registered A/C

This procedure is optional. If the organisation intends to have this procedure approved it shall comply with paragraph 2.6.1 of AMC2 145.A.50(d). The intention of this paragraph is that a Part-145 organisation may issue a Form 1 for those components only if compliance with paragraph 2.6.1(a) to 2.6.1.(i) of the AMC can be demonstrated.

- ☐ Swap /change over serviceable components between Mauritius registered A/C or between different positions of the same Mauritius registered aircraft

This procedure is optional. A component removed serviceable shall be issued a component certificate of release to service before being installed in another aircraft or another position of the same aircraft. The CRS may be issued by using an DCA Form 1 or an internal release document as indicated under paragraph 2.16.3. This procedure shall describe how the CRS is issued to ensure compliance with paragraph 2.6.1 of AMC2 145.A.50(d), regardless the type of CRS the maintenance organisation intends to use (DCA Form 1 or internal release document)

- ☐ Issuance of an DCA Form 1 for components removed serviceable from a non-Mauritius registered A/C *This procedure is optional. It is only applicable when the maintenance organisation also holds an DCA CAMO approval. Paragraph 2.6.2 of AMC2 145.A.50(d) applies.*

- ☐ CRS in the case of one-off authorisation (the MOE 3.9 specifies the related qualification requirement)
 - ☐ Notification to DCA
 - ☐ Definition of records to be kept and location of records
 - ☐ Task re-checked when affect flight safety

2.16.3 Components/engines/APUs maintenance release to service (Cx/Bx ratings).

- ☐ Issuance and completion instruction of CRS after components/engines/APUs maintenance (DCA Form 1):
 - ☐ Responsibilities of the components/engines/APU certifying staff
 - ☐ if applicable: CRS on internal tag
 - ☐ if applicable: DCA Form 1 issued for unserviceable component undergoing a series of maintenance processes (limitations to be entered in block 12)

☐ Particular cases of issuance of a CRS by using an internal release document instead of the DCA Form 1 *The use of this procedure is optional and shall be limited to cases when the maintenance organisation maintains a component for use by the same organisation subject to the acceptance of the customer/operator. The CRS on internal release document shall contain the same level of information included in the DCA Form 1 and shall be issued by an appropriately authorised certifying staff.*

- *Case 1: this procedure may be used under Cx/Bx rating*
- *Case 2: A possible application of this procedure under Ax rating is to allow issuing the component CRS in the case of swap /change over serviceable components between Mauritius registered A/C without need of issuing an DCA Form 1.*

- ☐ Issuance of a CRS with limitations/incomplete work within engine/APU/component limitations as per approved data (e.g. maintenance organisation not in condition to complete all the maintenance ordered, deferred maintenance, customer/operator approval)

2.16.4 NDT release to service (D1 rating).

- ☐ Issuance and completion instruction of CRS after NDT (DCA Form 1):
 - ☐ Responsibilities of the NDT certifying staff

- ☐ Issuance of a CRS with limitations/incomplete work within aircraft/engine/APU/component limitations as per approved data (e.g. maintenance organisation not in condition to complete all the maintenance ordered, deferred maintenance, customer/operator approval)

2.17 Records for the Operator.

145.A.55(a)(2)

- ☐ Composition of maintenance records to be provided to the customer/operator
- ☐ Contracted record keeping for operators/Arrangements for processing and retention of Operator's maintenance records

This procedure is only applicable when the maintenance organisation is retaining records on behalf of the customer operator according to Part-M requirements (e.g. Original Aircraft Technical Logbooks, Life limited parts records, etc.)

2.18. Occurrence Reporting.

145.A.60(a), 145.A.60(b), 145.A.60(c), 145.A.60(d); AMC 1 145.A.60(a); AMC 2 145.A.60(a); GM1 145.A.60; GM1 145.A.60(b);

2.18.1 Mandatory Occurrences

This procedure must describe the mandatory reporting to DCA, to the customer/CAMO and to the design approval holder of the aircraft or component any safety-related event or condition of an aircraft or component identified by the organisation which endangers or, if not corrected or addressed, could endanger an aircraft, its occupants or any other person, and in particular any accident or serious incident.

All maintenance personnel are responsible to report occurrences using the internal safety reporting system described in MOE 3.2.1. The scheme will identify the occurrences to be reported according to the list and method described in this chapter.

☐ List of Reportable occurrences

For organisations having their principal place of business in Mauritius lays down a list classifying occurrences in civil aviation to be mandatorily reported. This regulation can be used as reference also from the Foreign Part-145 organisations. AMC-20 'General Acceptable Means of Compliance for Airworthiness of Products, Parts and Appliances' provides further details on occurrence reporting (AMC 20-8A) and reportable occurrences.

- ☐ Shall also include, notification to DCA of all cases where an occurrence is originated as a result of maintenance carried out by the organisation, regardless of the registration of the aircraft or customer and besides any other reporting responsibility to the competent authority responsible for the approval under which the maintenance was carried out

A typical example is a situation where the organisation is made aware of a technical incident of a non-Mauritius customer immediately following a maintenance carried out by the organisation itself, e.g. where an incorrect assembly of aircraft parts by the maintenance organisation was identified as the cause of the incident.

☐ Method to report occurrences to DCA: shall be done directly using the DCA procedures

- ☐ Reporting Suspected Unapproved Parts: a SUP questionnaire has to be completed which is available for download on the DCA website.

☐ Methods for reporting to:

- ☐ entity responsible for the continuing airworthiness of that aircraft; For events or conditions that affect aircraft components, reporting to the entity that requested the maintenance.
- ☐ Organisation responsible for design

☐ Confidentiality safeguard for the identity of the reported and the persons mentioned in the report Reporting timescale

☐ Reports must contain pertinent information and evaluation of results (where known)

☐ Person responsible for reporting (reference can be base to the safety reporting scheme in MOE 3.2.1)

☐ Occurrences reported by subcontractors

- ☐ Follow-up report

This report is intended to provide details of the actions the organisation intends to take to prevent similar occurrences in the future and shall be made as soon as those actions have been identified.

2.18.2 Voluntary Occurrences

This procedure must describe the voluntary reporting. This reporting is intended to feed the safety reporting scheme described in MOE 3.2.1.

- ☐ Voluntary reporting method

2.19 Return of Defective Aircraft Components to Store.

145.A.42(a).(iii)

This chapter shall refer to the process of parts returned by maintenance teams to the store.

- ☐ Aircraft component received in serviceable status but found “defective” at installation (e.g. involvement of Compliance Monitoring for investigation, possible need to report the occurrence as per MOE 2.18)
- ☐ Labelling and handling of unserviceable components (link between involved departments)
- ☐ Labelling and handling of unsalvageable components (link between involved departments)

2.20 Defective Components to Outside Contractors.

145.A.75(b)

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

This chapter is only applicable when the maintenance organisation is sending/contracting component maintenance to:

- *Contracted DCA Part-145 approved Organisation. This fact shall be reflected in the MOE 2.1 and the contracted organisation(s) listed in MOE chapter 5.4, or*
- *Subcontracted Organisation not holding an DCA Part-145 approval. This fact shall be reflected in the MOE 2.1 and the “Subcontractors” listed in the MOE chapter 5.2.*

- ☐ Dispatch of components for maintenance Identification of required work
- ☐ Return of the serviceable component after maintenance at the contractor/subcontractor facility Control of dispatch, location and return
- ☐ Return of unserviceable loan parts
- ☐ Management of the packaging and special transportation condition (e.g.: Wheels – oxygen bottles)

2.21 Control of Computer Maintenance Records System.

145.A.45(e), 145.A.55(a)(3)2, GM 145.A.55(a)(1)(1)

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

This chapter shall not be confused to chapter 2.14 "Technical record control" which is intended to cover the record keeping requirement addressed in 145.A.55.

- ☐ Description of the computer records system in use and relate objectives (e.g. AMOS to track on-going maintenance in the hangar, etc.)
- ☐ Information retrieval
- ☐ Back-up systems (frequency, means, and delay) and second site storage (frequency, means and delay) Security and safeguards to unauthorised access
- ☐

2.22 Control of Man-Hour Planning versus Scheduled Maintenance Work.

145.A.47(b), 145.A.47(c), 145.A.30(d), AMC1 145.A.30(d), 145.A.25(a)1, 145.A.25(a)2, AMC1 145.A.25(a)

- ☐ Maintenance man-hour plan (taking into account also maintenance activities carried out outside the scope of the Part-145 approval)

- ☐ Reviewed at least every 3 months and updated when necessary

- ☐ Covering all staff (e.g. certifying staff, inspectors, mechanics, planners, quality auditors, etc.)

Particular attention shall be given to the situation when the same person is acting with different roles during a particular maintenance check (e.g. a person who is acting at the same time as cat. C certifying staff and B1 support staff during a particular base maintenance check, a person who is acting at the same time as component certifying staff and sign-off staff during a particular component workshop maintenance, etc.). In such cases the man-hour plan for the particular maintenance check should take into account this aspect to ensure the person is allocated enough time to carry out the necessary activities required for each of the different roles he/she undertakes and appropriate consideration is given to human performance limitations.

- ☐ 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 base maintenance. The relation between the hangar visit plan and the man-hour plan shall be described. The hangar visit plan shall also include non-commercial air transport or other activities.

- ☐ Management system of company planning versus time available (e.g. A/C or components base maintenance activity ...)

- ☐ Type of planning (man hours availability versus work load) Type of factors taken into account in the planning

- ☐
 - ☐ Human performance limitations

- ☐
 - ☐ Complexity of work

- ☐
 - ☐ Additional factors

- ☐ Planning revision process Organisation of shifts



- ☐ Use of "contracted" ²² personnel

At least half the staff that perform maintenance in each workshop, hangar or flight line on any shift shall be employed to ensure organisational stability. For the purpose of meeting a specific operational necessity, a temporary increase of the proportion of contracted staff may be permitted to the organisation by the competent authority, in accordance with an approved procedure to be included in this MOE chapter, which shall describe the extent, specific duties, and responsibilities for ensuring adequate organisation stability.

- ☐ Procedure to manage risks of work force unbalances

- ☐ Actual staff available lower than planned level for any shift or period

- ☐ Temporary increase of contracted staff for specific operational needs

- ☐ Notification to the Compliance Monitoring Manager and Accountable Manager of deviations exceeding 25% between the work load and the man hour availability.

²² "Contracted" means the person is employed by another organisation and contracted by that organisation to the maintenance organisation approved under Part-145.

2.23 Critical maintenance tasks and error-capturing methods

145.A.48(c)(1,2), AMC1 145.A.48(c)(2,3), AMC2 145.A.48(c)(2,3), AMC3 145.A.48(c)(2,3), AMC4 145.A.48(c)(2,3)

2.23.1 Critical maintenance tasks

- ☐ Definition of “critical maintenance task”

“Critical maintenance task” means a maintenance task that involves the assembly or any disturbance of a system or any part of an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety.

- ☐ Procedure to identify of a list of “critical maintenance tasks” defined by the maintenance organisation (e.g. tasks that may affect aircraft stability control systems such as autopilot or fuel transfer, tasks that may affect the propulsive force of the aircraft including installation of engines/propellers/rotors, etc.)
 - ☐ Person responsible to amend the list
 - ☐ Data sources used to identify and amend the list of “critical maintenance tasks” (TCH data, occurrence reporting, results of audit, feedback from training, etc.)

This procedure shall ensure that critical maintenance tasks are reviewed to assess the impact on flight safety. The list of critical maintenance tasks shall be customized to the scope of work of the organisation and may contain critical tasks peculiar only to certain aircraft or components. This list may be included into a separate document under the control of the Compliance Monitoring Manager.

The list of “critical maintenance tasks” should be subject to continuous evaluation and when necessary amended by the organisation as the result of maintenance errors investigations, audit, TCH data analysis, etc.

When the operator/customer defines its own list of critical maintenance tasks, the effective independent inspection tasks to be carried out are the independent inspections required by the Part-145 MOE plus the ones required by the customer/operator.

2.23.2 Error-capturing methods

This paragraph shall identify and detail the management of each possible error-capturing method in use by the organisation

- ☐ Identification of the error-capturing method(s) to be used:
 - ☐ The primary error-capturing method to be used shall be the independent inspection
 - ☐ Re-inspection (limited to unforeseen cases when only one person is available)
- ☐ Independent inspection procedure

This paragraph shall address the requirements for independent inspection

- ☐ Definition of independent inspection
- ☐ Personnel authorised for the independent inspections

*The qualification of this personnel is expected in the **MOE 3.13 Qualifying Inspectors***

- ☐ How to perform an independent inspection
 - ☐ What has to be checked (e.g. all those parts of the system that have actually been disconnected or disturbed shall be inspected for correct assembly and locking, etc.)
 - ☐ How a task requiring independent inspection is signed-off

This procedure can refer to the MOE 2.13 sign-off policy. Consistency has to be ensured with MOE 2.13 chapter

- ☐ Reinspection procedure

This paragraph shall address the requirements of for reinspection

- ☐ Definition of reinspection
- ☐ how to perform a reinspection by the same person
- ☐ how to record the identification and the details of the reinspection

2.24 Reference to Specific Procedures.

AMC1 145.A.35(a)

- ☐ Special Maintenance tasks, e.g.:
 - ☐ Engine run up
 - ☐ Aircraft pressure run
 - ☐ Aircraft towing
 - ☐ Aircraft taxiing
 - ☐ Technical wash
 - ☐ Control/ supervision of de-icing systems
 - ☐ Maintenance check flight

2.25 Procedures to Detect and Rectify Maintenance Errors.

145.A.48(b), 145.A.48(c)(3), AMC 145.A.48(c)(3), GM1 145.A.48(c)(3)

This chapter shall describe procedures to minimise the risk of errors and errors being repeated in identical maintenance tasks compromising more than one system or function.

Maintenance errors may also be detected as part of the occurrence reporting system, for example following internal or external occurrence reports investigation; this process is expected to be described in the [MOE chapter 2.18](#).

2.25.1 Procedure to minimise the risk of errors and preventing omissions

Consistency with the [MOE 2.13 chapter \(sign-off policy\)](#) shall be ensured.

- ☐ Policy to ensure every maintenance task is signed-off only after completion
- ☐ Describe how the grouping of tasks for the purpose of sign-off allows critical steps to be clearly identified
- ☐ Procedure to ensure work performed by non-authorised personnel (e.g. temporary staff, trainees) is checked and signed-off by an authorised person

2.25.2 Procedure to minimise the risk of errors being repeated in identical maintenance tasks compromising more than one system or function

- ☐ Criteria to define the identical maintenance tasks

The objective of the procedure is to ensure no person is required to perform a maintenance task involving removal/installation or assembly/disassembly of several components of the same type fitted to more than one system²³ on the same aircraft or component during a particular maintenance check.

2.25.3 Identification of methods in use to minimise the risks

- ☐ Planning method (only applicable to identical maintenance tasks)

This paragraph shall address the GM1 145.A.48(c)(3) describing how the planning method is used to minimise the risk of errors being repeated in identical maintenance tasks planning the performance by different authorized persons of the same task in different systems

- ☐ Identification of the error-capturing method(s) to be used (the specific procedure on how each error capturing method is accomplished shall be detailed in the [MOE 2.23](#)).

When more than one error-capturing method is defined, a criteria need to be established to prioritise the methods to be adopted. The use of a table is recommended

²³ the failure of which could have an impact on safety

“EXAMPLE”

Refer to MOE 2.13 “sign-off” policy for details of how to sign-off each type of task

Type of Task	Description of Task	Minimizing the risk of errors being repeated in identical maintenance tasks and error capturing methods priority	
		Primary	Secondary
Identical Maintenance task	removal/installation or assembly/disassembly of several components of the same type fitting to more than one system , a failure of which can have an impact on safety, on the same aircraft or component during a particular maintenance check. (e.g. dual engine oil uplift, replacement of both cabin pressure controllers on one aircraft, etc.)	Performance by different authorized persons of the same task in different systems (planning method)	Re-inspection by the same authorized person who has performed the task (limited to unforeseen cases when only one person is available)
Critical Maintenance Task	a maintenance task that involves the assembly or any disturbance of a system or any part of an aircraft, engine or propeller that, if an error occurred during its performance, could directly endanger the flight safety . (e.g. one engine installation, one flight control rigging, etc.)	Independent inspection	
.....

2.26 Shift / Task Handover Procedures

145.A.47(c), AMC 145.A.47(c)

- ☐ Aims and objectives of the shift handover
- ☐ Training of personnel in shift/task handover processes Recording of shift/task handover
- ☐ Formalized shift handover process and required information
 - ☐ Facility status
 - ☐ Work status
 - ☐ Manning status
 - ☐ Outstanding issues
 - ☐ Other possible information
- ☐ Responsible person for managing and filling up the shift / task handover

2.27 Procedures for Notification of Maintenance Data Inaccuracies and Ambiguities.

145.A.45(c), AMC 145.A.45(c)

- ☐ Definitions of maintenance data ambiguities
- ☐ Method of internal notification of maintenance data ambiguities
- ☐ Method of external notification of maintenance data ambiguities to the authors of that data
- ☐ Method of assessment and extraction of those ambiguities/inaccuracies to be reported under MOE 2.18 as mandatory reportable occurrences
- ☐ Feedback to staff and implementation of TC Holder/Manufacturer corrections Impact of the data ambiguity
- ☐ on the on-going maintenance task

The authors may be any of the following:

- *Aircraft / component design organisation (AMM, SB, SRM..)*
- *The competent authority*
- *The organisation itself in the case of organisation job cards*
- *The customers in the case of job cards issued and furnished by the customers*

2.28 Production planning and organizing of maintenance activities.

145.A.47(a), AMC 145.A.47(a), 145.A.47(b), AMC1 145.A.45(b), 145.A.10, AMC1 145.A.10, 145.A.65(b)1; GM2 145.A.65(b)(1), GM1 145.A.47(b)

☐ Decision Making Process. Analysis of the work order to ensure:

- ☐ A clear work order or contract has been agreed between the maintenance organisation and the customer/operator to clearly establish the maintenance to be carried out

GM2 145.A.65(b)(1) provides guidance on the elements that need to be considered for the maintenance contract between the CAMO and the maintenance organisation. The Part-145 organisation should take into account these elements to ensure that a clear contract or work order has been concluded before providing maintenance services.

- ☐ the requested maintenance remains within the approved scope of approval
- ☐ need of special facilities

The main driver to determine whether the requested maintenance is within the scope of approval, shall be the content of the specific maintenance activity ordered. Additional tasks or constraints may be also associated to the requested activity such as deferred items, rectification of defects, inspection requesting skilled workers, qualification of the certifying staff, environmental conditions, overall length of the tasks etc. Therefore a “decision making process” is necessary to assess whether the content of the maintenance activity is within the scope of approval. In addition, access to special facilities (e.g. hangar for line maintenance, etc.) shall be part of the decision making.

☐ Verification that the maintenance work package provided by the customer is utilizable by the maintenance organisation. In any case the organisation shall issue an internal work package as detailed in **MOE Chapter 2.13**:

- ☐ Case 1: customer job cards to be used (with appropriate training)
- ☐ Case 2: work package to be developed and prepared by the maintenance organisation based on the customer work order

- ☐ Control of the availability and update of maintenance documents (list + MM / job cards /...)
- ☐ Procedure for establishing all necessary resources are available before commencement of work (e.g. hangar, manpower with required capabilities, staff, facilities, tools, equipment, parts, documentation, etc.)
- ☐ Procedure for outsourcing contractors as necessary.
- ☐ Procedure for organizing maintenance personnel and providing all necessary support during maintenance
- ☐ Organizing of shifts

Good practices in the maintenance domain and applicable rules should be considered. The resulting shift schedule should be shared with the maintenance staff sufficiently in advance so they can plan adequate rest. The established shift durations should not be exceeded merely for management convenience even when staff is willing to work extended hours.

☐ Working time policy.

Guidance on working time may be found on ICAO Doc.9824 Human Factors Guidelines for Aircraft Maintenance Manual.

☐ Consideration of fatigue in the planning of maintenance

Fatigue is a physiological state of reduced mental or physical performance capability resulting from sleep loss or extended wakefulness, circadian phase, or workload (mental and/or physical activity) that can impair a person’s alertness and ability to safely perform his/her tasks.

☐ Planning of critical maintenance tasks

2.29 Airworthiness review procedures and records.

This chapter is only applicable to organization with PPB located in Mauritius

2.30 Fabrication of Parts.

145.A.42(b)(iii) , AMC1 145.A.42(b)(iii)

This procedure can only be included when the possibility to fabricate parts is included in the MOE 1.9 chapter.

2.31 Procedure for component maintenance under aircraft or engine rating

GM1 145.A.45(b)

This procedure can only be included when the possibility to use component maintenance data under aircraft or engine ratings is included in the MOE 1.9 chapter.

2.31.1 Conditions for using the privilege

- ☐ Justification to the competent authority on the need of this privilege and confirmation that it is a simple component maintenance as defined in the following paragraph
- ☐ Procedure to assess the task is within the technical capability of the maintenance organisation (e.g. staff, tools, maintenance data, materials, etc.)

This assessment can be considered met without further demonstration, where the organisation holds the relevant Cx/Bx rating and performs a task included in the already approved capability at P/N level, however using workshop staff “on-wing” under the Ax rating.

- ☐ Assessment on the need to develop maintenance instructions for using the particular maintenance data in order to precisely record the part of the maintenance task effectively carried out (e.g. a B1 rated AMO using the AMM, will not take care of circuit breaker deactivation in the cockpit and should not record this task as being done by the AMO)
- ☐ Where applicable, procedure to liaise with the Ax rated AMO being responsible for some parts of the task when a Cx or Bx AMO²⁴ are working on-wing (e.g. circuit breaker deactivation, etc.)
- ☐ Procedure entailing possible CRS limitations (e.g. leak test needed by the Ax AMO following a task carried out by the Cx or Bx AMO)
- ☐ Procedure to cover cases where the same maintenance task is available in different maintenance data with different allowed defects. In such cases, the AMO can only use the particular maintenance data if clearly specified in the work order (e.g. a Bx shall not use the AMM under its own decision, when the same task is available in EMM)
- ☐ need of training in the use of maintenance data and in the particular maintenance environment (e.g. a Cx or Bx rated AMO working on-wing in an aircraft line or base maintenance environment)
- ☐ access to the maintenance data

²⁴ The possibility for a Cx or Bx AMO to work on-wing using AMM data shall be carefully assessed. Those organizations are clearly limited to works respectively at component or engine level carried out on-wing. It is unreasonable and to be considered outside their scope of approval to perform AMM tasks which are clearly outside the particular component or engine capability (e.g. the Cx or Bx AMO shall not perform any task in cockpit even if related to verifying the serviceability of the component or engine on which the organisation is working, shall not perform any deactivation task at aircraft level such as circuit breaker deactivation, etc.)

2.31.2 Definition of Simple component maintenance

This definition is to be customized to the scope of work of the organisation. It is not intended to define simple tasks which are not applicable to the organisation.

The criteria below are only intended to address the case of an Ax rated organisation wishing to use component maintenance data.

- ☐ The tasks to be carried out are:
 - ☐ not requiring any specific workshop environment (e.g. special temperature/humidity requirements, special cleanness standard) and/or workshop test bench
 - ☐ limited to cabin related maintenance tasks, such as:
 - ☐ cosmetic repairs (e.g. seats, galleys, lavatories, stowage, partitions)
 - ☐ minor inspection (e.g. fire extinguisher weighing, seats inspection)
 - ☐ minor repairs (e.g. seats subpart replacement)
- ☐ The component may be temporarily removed from aircraft in order to improve access to that component, except when such removal generates the need for additional maintenance. The component shall be reinstalled back to the same aircraft, and the related repair recorded in the aircraft maintenance work package
- ☐ Amendment status of component maintenance data used under this procedure shall be controlled as per MOE chapter 2.8

Other scenarios may be considered for inclusion in this paragraph subject to the acceptance of the assigned inspector.

2.32 Maintenance away from approved location

145.A.75(c);

This procedure can only be included when the possibility to perform maintenance outside the approved locations is included in the MOE 1.9 chapter.

- ☐ Maintenance outside the approved location (s)

2.33 Procedure for assessment of workscope as line or base maintenance

The content of chapter may be included in the chapter 2.28 “Production planning and organizing of maintenance activities”, which describes the “Decision making process” (in this case the MOE 2.33 should cross-refer to MOE 2.28).

The process described in the title of this MOE 2.33 chapter applies to all types of organisations holding Ax ratings, therefore the assessment of workscope as line or base maintenance is only one particular case of the larger “Decision making process” intended to assess any workscope.

PART L2 ADDITIONAL LINE MAINTENANCE PROCEDURES

MOE Part L2 is intended to provide additional procedures which are specific for the line maintenance environment, which have not been covered in the MOE Part 2, or to complement those Part 2 procedure if necessary. Where a procedure, was already covered in the MOE part 2 and there is no need of further detail to be added, a direct reference to the MOE Part 2 chapter may be used in the relevant MOE Part L2 chapter.

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

145.A.75(d)

This chapter must describe the additional / special procedures of the management of the facilities, materials/ ingredients and tools/ equipment, technical documentations, staff associated to the line maintenance activity. For example, this applies when a line station separate from the main maintenance site needs to use procedures to control the components, tools, equipment which are not the same used in the main site as described in MOE Part 2.

- ☐ Component / Material acceptance - (required documentation, condition, "Quarantine" procedure)
- ☐ Components removed serviceable from aircraft;
- ☐ Procedures to maintain satisfactory storage conditions - (routable, perishables, flammable fluids, engines, bulky assemblies, special storage requirements)
- ☐ System for control of shelf life and modification standard
- ☐ Tagging / labelling system (serviceable, unserviceable, scrap, etc.) Release of components to the
- ☐ maintenance process
- ☐ Tools and test equipment, servicing and calibration programme / equipment register Identification of
- ☐ servicing / calibration due dates

L2.2 Line Maintenance Procedure Related to Servicing / Fueling / De-icing / etc.

145.A.75(d)

This chapter must describe the additional / special procedures of management of the specific activities

- ☐ Technical and maintenance documentation management (control and amendment) Company Technical
- ☐ Procedures / Instructions management
- ☐ Fuel supply quality monitoring (bulk storage / aircraft re-fueling) Ground de-icing (procedures / monitoring
- ☐ of sub-contractors) Maintenance of ground support equipment
- ☐ Monitoring of sub-contracted ground handling and servicing

L2.3 Line Maintenance Control of Defects and Repetitive Defects.

145.A.75(d)

This chapter must describe the general procedures followed by the organisation regarding the rectification of defects in line maintenance. The identification and management of repetitive defect is an operator responsibility, however the maintenance organisation may also identify such repetitive defects or be involved by the operator in related rectification actions and this MOE chapter is also intended to describe this area of activity.

- ☐ Rules for deferring (periods - review - permitted personnel - conformity with MEL /CDL provisions)
- ☐ Awareness of deferred defects carried by aircraft
- ☐ Analysis of tech log (repetitive defects – crew complaints - Analysis and transfer of cabin log items as required)
- ☐ Co-ordination with the operator
- ☐ Procedure on how to deal with defects requiring B2 certifying staff in the case of line stations where such staff is not permanently available.

L2.4 Line Procedure for Completion of Technical Logs.

145.A.75(d)

This chapter must describe the additional procedures of management/completion of the technical log(s) in use. It must also cover the procedures for ETOPS release where applicable. These procedures must be associated to chapters 2.13, 2.16 of the MOE.

- ☐ Technical Log system:
 - ☐ Taking into account Operator Procedure
 - ☐ Completion of Sector Record Page
 - ☐ Distribution of copies
- ☐ Training on customer operators procedures and maintenance record completion (logbook, ...)
- ☐ Certification / Sign-off (Maintenance Statements) Maintenance Independent Inspections
- ☐ ETOPS Certification Retention of records
- ☐
 - ☐ Periods
 - ☐ Methods and security

L2.5 Line Procedure for Pooled Parts and Loaned Parts.

145.A.75(d)

This chapter must describe the additional management procedures for pooled or loaned parts specific to the line maintenance activity. It shall also cover the removal of serviceable parts from aircraft for use on another aircraft. These procedures must be associated to chapters 2.2, 2.3, 2.19, 2.20 of the MOE.

- ☐ Verification of approved sources of parts (sources, conformity with company requirements, Modification Standard and AD compliance, records)
- ☐ Compliance with loan and contract requirements
 - ☐ Tracking and control
 - ☐ Required documentation
- ☐ Processing removed loan parts for return to source (records) Components removed serviceable from aircraft

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

145.A.75(d)

This chapter must describe the additional management procedures for treatment of defective components associated with the line maintenance activity. These procedures must cover the same subjects specified in chapters 2.19, 2.20 (return of removed components, sending components...) of the MOE.

- ☐ Required documentation Service record
- ☐ Processing advice of removal (W/O) and dispatch to technical records Dispatch of the part for rectification

L2.7 Line procedure for critical maintenance tasks and error-capturing methods.

145.A.75(d)

This chapter is the equivalent of the chapters 2.23 and 2.25 of the MOE for the line maintenance activity.

It is intended to describe peculiarities, if any, for managing the critical maintenance tasks in the line maintenance environment together with any associated error-capturing method.

PART 3 – MANAGEMENT SYSTEM PROCEDURES

3.1 Hazard identification and safety risk management schemes

145.A.200(a)(3), GM1 145.A.200(a)(3),

This chapter should describe the identification of safety hazards associated with the maintenance activities, the assessment of the associated safety risks and the investigation process, including the mitigation actions to monitoring of their effectiveness.

☐ Hazard identification process.

- Process for safety data collection; proactive and reactive methods;
- Identification of data sources, external and internal;
- Process for safety data analysis;
- Procedure(s) for the identification and classification of hazards relevant to the Organisation/activity;
- Records management (hazard log/register);
- Responsibilities and management of the hazard log;
- Internal communication process;

☐ Safety risk management

The Organisation should describe in detail the risk assessment process in place.

Once hazards are identified, the risk of their consequences should be assessed, analysed and mitigation actions should be implemented accordingly. A formal safety risk management process should be developed and maintained considering the following:

- ☐ Analysis process (e.g. in terms of the probability and severity of the consequences of hazards and occurrences)
 - *Severity should evaluate the seriousness of the consequences*
 - *Likelihood should identify the possibility (and frequency) of the occurrence;*
 - *The likelihood and severity should be clearly defined.*
 - *Regardless of the method used (ICAO safety risk matrix, ARMS, BOW-TIE, etc.), it is important to customize the risk assessment matrix so as to reflect the operational profile.*
- ☐ Tolerability assessment
 - *The organisation should assess the acceptability of the potential consequences associated with the potential occurrences and hazards identified. This should be done in accordance with the organisation's defined safety performance criteria*
- ☐ Mitigation actions
 - *Control (in terms of mitigation) of risks to an acceptable level*
 - *Decision-making process, including responsibilities*
 - *Implementation of actions*
 - *Monitoring of the effectiveness of the implemented actions*

Mitigation is the process of incorporating risk barrier controls (for example, preventive controls or recovery controls) to reduce the severity and/or the likelihood of the identified hazard, therefore reducing the risk to an acceptable level, and, if possible, to eliminate the risk.

Those risk controls should be Specific, Measurable, Agreed, Realistic and Time constrained. Human Factors should be considered as part of the development of risk controls.

The responsible person/position in charge of the implementation and management of mitigation measures should be identified (including follow-up procedure).

Effectiveness of mitigations should be monitored. When necessary, risk controls should be changed as a result of that assessment.

3.2 Internal safety reporting and investigations.

145.A.202(a);145.A.202(b);145.A.202(c);145.A.202(d); AMC1 145.A.202; GM1 145.A.202;

☐ Safety Reporting Scheme

*As part of its management system, the organisation shall establish an internal safety reporting scheme to enable the collection and evaluation of occurrences to be reported, as detailed in **MOE 2.18**.*

Through this scheme, the organisation shall:

- (1) identify the causes of and contributing factors to any errors, near misses, and hazards reported and address them as part of safety risk management process*
- (2) ensure evaluation of all known, relevant information relating to errors, the inability to follow procedures, near misses, and hazards, and a method to circulate the information as necessary.*

This chapter should include, but not be limited to, the following information, with respect to the internal safety reporting scheme:

☐ Confidentiality and safety promotion

The internal safety reporting scheme should be confidential reporting system and enable and encourage free and frank reporting of any potentially safety-related occurrence, including incidents such as errors or near misses, safety issues and hazards identified. This will be facilitated by the establishment of a just culture.

☐ Identification of clear policy and objectives

The internal safety reporting scheme should include:

- clearly identified aims and objectives with demonstrable corporate commitment;*
- a just culture policy as part of the safety policy (as defined in **MOE 1.2**), and related just culture implementation procedures;*

☐ Safety investigation process

- ☐ *Description of the process to investigate occurrences (e.g. criteria to identify occurrences to be investigated, investigation report format, methods of maintenance errors investigation such as “maintenance errors decision aid-MEDA” process, corrective actions in response to investigation findings, follow-up system, feedback to staff, etc.)*
- ☐ *Maintenance errors identified to be used for internal human factors training and for amendment of the procedure for critical maintenance tasks (may cross refer to MOE chapter 2.23)*

In line with its just culture policy, the organisation should define how to investigate incidents such as errors or near misses, in order to understand not only what happened, but also how it happened, to prevent or reduce the probability and/or consequence of future recurrences.

*The scope of internal investigations should extend beyond the scope of the occurrences required to be reported to the competent authority in accordance **MOE 2.18**.*

The internal safety reporting scheme should include a detailed process:

- to identify those reports which require further investigation;*
- to classify occurrences against the mandatory reportable criteria established in **MOE 2.18** and decide on further actions accordingly;*
- to investigate all the causal and contributing factors, including any technical, organisational, managerial, or Human Factor issues, or any other contributing factors related to the occurrence, incident, error or near miss*
- to analyse the collective data showing the trends and frequencies of the contributing factor;*

- *to identify, implement and monitor the effectiveness of the appropriate corrective and preventive actions based on the findings of investigations;*

Additional considerations for this chapter include:

- ☐ Initial and recurrent training requirements for staff involved in internal investigations;
- ☐ Coordination and cooperation with the customer/operator on occurrence investigations by exchanging relevant information to improve aviation safety;
- ☐ Recurrent training updates, in accordance with the established training policy and procedures, whilst maintaining appropriate confidentiality;
- ☐ Feedback loop to reporters and other maintenance staff.

3.3 Safety action planning.

145.A.202(a)

This chapter should describe the safety action planning process in place, describing the Safety Review Board (SRB) and Safety Action Group (when applicable) composition, meetings and functions.

The SRB should be a high-level committee that considers matters of strategic safety in support of the Accountable Manager's safety accountability. The board should be chaired by the Accountable Manager and composed of the Nominated Persons.

The SRB should monitor:

- *safety performance against the safety policy and objectives;*
- *that any safety action is taken in a timely manner; and*
- *the effectiveness of the organisation's management system processes.*

The SRB may also be tasked with:

- *reviewing the results of compliance monitoring;*
- *monitoring the implementation of related corrective and preventive actions.*

Depending on the size of the organisation and the nature and complexity of its activities, a safety action group may be established as a standing group or as an ad hoc group to assist, or act on behalf of the Safety Manager or the SRB.

More than one SAG may be established, depending on the scope of the task and the specific expertise required. The SAG usually reports to, and takes strategic direction from, the SRB, and may be composed of managers, supervisors and personnel from operational areas.

The SAG may be tasked with or assist in:

- *monitoring safety performance;*
- *defining actions to control risks to an acceptable level;*
- *assessing the impact of organisational changes on safety;*
- *ensuring that safety actions are implemented within agreed timescales;*
- *reviewing the effectiveness of previous safety actions and safety promotion.*

This procedure should also specify when/how often SRB meetings and SAG meetings take place.

3.4 Safety performance monitoring.

145.A.202(a)

MOE chapter 3.3 and 3.4 are strictly connected. The expected intent of both chapters is described in the chapter MOE 3.3 of this User Guide. However, this MOE chapter 3.4 can be used to further develop the safety performance monitoring process within the organisation.

3.5 Change management.

145.A.202(a); GM2 145.A.200(a)(3),

Changes in organisational structure, facilities, scope of work, personnel, documentation, policies and procedures, can result in unintended consequences and the inadvertent introduction of new hazards, exposing the organisation to new or increased safety risk(s).

The introduction of a change is the trigger for the organisation to perform their hazard identification and risk management process.

Some examples of change include, but are not limited to:

- *changes to the organisational structure;*
- *the inclusion of a new aircraft type in the terms of approval;*
- *the addition of aircraft of the same or a similar type;*
- *significant changes in personnel (affecting key personnel and/or large numbers of personnel, high turn-over);*
- *new or amended regulations;*
- *changes in the security arrangements;*
- *changes in the economic situation of an organisation (e.g. commercial or financial pressure);*
- *new schedule(s), location(s), equipment, and/or operational procedures; and*
- *the addition of new subcontractors*

The change management process should consider, :

- ☐ Identification and description of the change
- ☐ Assessment of the criticality and impact
- ☐ Existing controls and implementation of new controls
- ☐ Change implementation and transition period
- ☐ Monitoring the effectiveness of the change implementation

The Organisation shall develop and maintain a process to identify and assess changes which may affect the level of safety risk associated with its services and to identify and manage the safety risks that may arise from those changes. The management of change should be a documented process to identify external and internal changes that may have an adverse effect on the safety and compliance of its continuing airworthiness management activities. The introduction of a change is a trigger for the organisation to perform their hazard identification and risk management process.

Regardless of the magnitude of the change, large or small, its safety implications should always be proactively considered. This is primarily the responsibility of the team that proposes and/or implements the change.

The magnitude of a change, its safety criticality, and its potential impact on human performance should be assessed in any change management process. A change may have the potential to introduce new, or to exacerbate pre-existing, human factors issues. The purpose of integrating human factors into the management of change is to minimise potential risks by specifically considering the impact of the change on the people within a system.

The process should also consider business related changes (organisational restructuring, resources, IT projects, etc.) and interfaces with other organisations/departments. Responsibilities and timelines should be defined.

3.6 Safety training (including HF) and promotion.

145.A.202(a); GM5 145.A.30(e); GM1 145.A.65(b)(1); 145.A.200(a)(4); AMC1 145.A.200(a)(4); GM1 145.A.200(a)(4).

3.6.1 Safety Training Programme and promotion.

☐ Safety training programme

Safety training, combined with safety communication and information sharing, forms part of safety promotion. The organisation should ensure that:

- *All staff are able to demonstrate an understanding of safety management principles including Human Factors, related to their job function.*
- *All staff are familiar with the safety policy and the procedures and tools that can be used for internal safety reporting.*
- *Staff who have been designated safety management responsibilities are familiar with the relevant processes in terms of hazard identification, risk management, and the monitoring of safety performance.*

For that purpose, personnel involved in the basic maintenance service of the organization should receive both initial and recurrent safety training, appropriate for their responsibilities. This should include at least the following staff members:

- *nominated persons, line managers supervisors;*
- *certifying staff, support staff and mechanics;*
- *Technical support personnel such as planners, engineers, technical record staff;*
- *Persons involved in compliance monitoring and/or safety management-related processes and tasks, including the application of human factors principles, internal investigations and safety training;*
- *Specialised services staff;*
- *Stores department staff, purchasing department staff;*
- *Ground equipment operators.*

Initial safety training should cover all the topics of the training syllabus specified in GM1 145.A.30(e) either as a dedicated course or else integrated within other training. The syllabus may be adjusted to reflect the particular nature of the organisation. The syllabus may also be adjusted to suit the particular nature of work for each function within the organisation.

Initial safety training should be provided within 6 months of joining the organisation, but temporary staff may need to be trained shortly after joining the organisation to cope with the duration of employment. Personnel being recruited from another organisation, and temporary staff should be assessed for the need to receive any additional safety training.

Training should be provided to management and staff at least:

- *during the initial implementation of safety management processes;*
- *for all new staff or personnel recently allocated to any safety management related task;*
- *on a regular basis to refresh their knowledge and to understand changes to the management system;*
- *when changes in personnel affect safety management roles, and related accountabilities/responsibilities; and*
- *when performing dedicated safety functions in domains such as safety risk management, compliance monitoring, internal investigations.*

Recurrent safety training should be delivered either as a dedicated course or else integrated within other training. It should be of an appropriate duration in each 2-year period, in relation to the relevant compliance monitoring audit findings and other internal/external sources of information available to the organisation on safety and HF issues.

Recurrent training should take into account certain information reported through the internal safety reporting scheme.

- ☐ System of maintaining personnel trained and competent to perform their tasks

The purpose of recurrent safety training is primarily to ensure that staff remain current in terms of SMS principles and HF, and also to collect feedback on safety and HF issues. Consideration should be given to involving compliance monitoring staff and key safety management personnel in this training to provide a consistent presence and facilitate feedback.

There should be a procedure to ensure that feedback is formally reported by the trainers through the internal safety reporting scheme to initiate action where necessary.

The organisation should establish communication about safety matters that:

- *ensures that all personnel are aware of the safety management activities, as appropriate, for their safety responsibilities;*
- *conveys safety-critical information, especially related to assessed risks and analysed hazards;*
- *explains why particular actions are taken; and*
- *explains why safety procedures are introduced or changed.*

- ☐ Communication means/information sharing related to safety matters

Significant events, changes and investigation outcomes should be communicated. Safety policy and objectives should be known by staff.

Regular meetings with personnel at which information, actions, and procedures are discussed, may be used to communicate safety matters. Safety bulletins/communications/newsletters/emails/etc. are other means used to share safety information.

The process should describe what, when, and how safety information needs to be communicated. Subcontracted/Contracted organisations should be included in the communication where appropriate.

The means of communication should be adapted to the audience and the significance of what is being communicated.

3.6.2 Safety Training (including Human Factors) Procedure.

145.A.30(e), AMC4 145.A.30(e), GM1 145.A.30(e);

This chapter shall refer the human factors training for the organisation personnel²⁶.

3.6.2.1 Initial Training (except C/S and S/S)

- ☐ Aims and objectives
- ☐ Categories of staff to be trained ☐ Implementation time frame
- ☐ Training methods and syllabus: {refer to GM 1 - 145.A.30 (e)} ☐ Duration of training
- ☐ Validation of the training courses (syllabus and duration) ☐ Requirements for trainers
- ☐ Training Records
 - ☐ Duration / location
 - ☐ Type of documents

²⁶ Initial training to Human Factors for Certifying Staff and Support Staff is defined in Chapter 3.9

3.6.2.2 All Maintenance staff Recurrent training

- ☐ Aims and objectives
- ☐ Categories of staff to be trained
- ☐ Training methods and syllabus: tailored to the audience / audit findings / feedback in relation to relevant quality audit findings and other internal/external sources of information available to the organisation on human errors in maintenance
- ☐ Duration of training
- ☐ Validation of the training courses (syllabus and duration)
- ☐ Requirements for trainers
- ☐ Training Records
 - Duration / location
 - Type of documents

Human factors training could be adjusted to reflect the particular nature of the organisation (size, scope of work). Human factors recurrent training shall be of an appropriate duration in each two year period.

3.7 Immediate safety action and coordination with the operator's ERP.

145.A.155

3.7.1 Immediate safety action

A procedure should be implemented to enable the organisation to act promptly when it identifies safety concerns with the potential to have immediate effect on flight safety, including clear instructions on who to contact at the owner/customer/operator, and how to contact them, including outside normal business hours

- ☐ Identification of responsibilities for contacting owner/operator/CAMO in case of safety concern with potential immediate effect on flight safety is identified.
- ☐ Internal and external coordination, including contact details of key functions and personnel within the Maintenance Organisation (manager, Nominated Postholder, etc.) and within the operator/CAMO (Maintenance Control Center, operator/CAMO contact person, etc.).

3.7.2 Coordination with the operator's ERP.

A procedure should be implemented to enable the organisation to act promptly when the Emergency Response Plan (ERP) is triggered by the operator and it requires the support of the Part-145 organisation, including clear instructions on who to contact at the owner/customer/operator, and how to contact them, including outside normal business hours

- ☐ Identification of responsibilities for the implementations and management of the ERP
- ☐ Procedure(s) for transition from normal to emergency operations
- ☐ Procedure(s) for transition from emergency to normal operations
- ☐ Internal and external coordination, including contact details of key functions and personnel
- ☐ ERP training requirements
- ☐ ERP training/simulations (scope, frequency)

3.8 Compliance Monitoring .

3.8.1 Audit plan and audit procedures

145.A.200(a)(6); AMC1 145.A.200(a)(6); AMC2 145.A.200(a)(6), AMC4 145.A.200(a)(6); AMC3 145.A.200(a)(6), GM1 145.A.200(a)(6), GM2 145.A.200(a)(6), GM3 145.A.200(a)(6),

This chapter must explain how the audit of internal procedures is organised and managed i.a.w. regulatory requirements. In particular 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 (link to chapter 3.6).

- ☐ Definition of the "system/procedure" audit
 - ☐ Single exercise audit or subdivided over 12 months
 - ☐ Definition of remote audit methodology and applicability

When remote audit methodology is used it should be clearly stated in the related audit reports.

- ☐ "System/procedure" Audit programme
 - ☐ System/procedure audit plan (refer to the example provided at the end of this paragraph) *The audit plan shall ensure that all aspects of Part-145 compliance are checked every 12 months. The cross reference table included in the chapter 1.5 of this User guide can be used as a reference of the level of detail expected in the system/procedure audit for compliance check of applicable regulation requirements and MOE chapters.*
 - ☐ Principles of annual audit procedure planning
 - ☐ Grouping of audits
 - ☐ Dates and timescales.

- ☐ Audit of the Compliance Monitoring by an independent auditor, being either:

It must be reminded that the Compliance Monitoring is required to be "independent" which normally means that the Compliance Monitoring Manager and the Quality Monitoring Staff are not directly involved in the Part-145 function being audited.

- ☐ A person employed by the maintenance organisation and working in another department (e.g. production), or;
- ☐ A person contracted by the maintenance organisation (part-time basis or short time contract based on the 145.A.30 (d) contracted personnel) to perform audits on the Compliance Monitoring procedures. This case does not mean subcontracting the Compliance Monitoring.
- ☐ Audit of contracted organisations /Subcontractors/suppliers, as applicable depending to the monitoring criteria defined in MOE chapter 2.1.
- ☐ Scheduled audits and unannounced audits to be carried out during maintenance including night shifts.
- ☐ Validation/internal approval of the audit programme and management of changes to the programme
- ☐ Follow up of the audit program: scheduled, performed, audit report issued, open/close

- ☐ Company Audit Policy including compliance audit:

- ☐ Audit notification;
- ☐ Audit reports (documents used, writer, issue, points checked and deviations noted, deadline for rectification)
- ☐ Allocation of resources to the audit (audit team, team leader, etc.)
- ☐ Principles when deviations are noted on a line of product

- ☐ Quality audit reports retention

- ☐ Duration (At least duration of 2 years from the date of the findings closure) / location
- ☐ Type of documents (notification, audit reports, check list, audit programs)

An audit report shall be raised each time a system audit is carried out describing what was checked and the resulting findings against applicable requirements, procedures and products

"EXAMPLE"

The purpose of this example is to provide an acceptable audit plan (there is any number of other acceptable working audit plans). The following criteria shall be met:

- *The audit plan is intended to monitor compliance with the applicable requirements and at the same time review all areas of the organisation, where such requirements are applicable;*
- *In order to achieve this objective, as a first element, the organisation needs to identify all the regulatory requirements, AMC and DCA user guides applicable to the activity and scope of work under consideration, to allow the audit plan to focus on the relevant subject matters. Each subject matter (e.g. facilities, personnel, etc.) should be cross-referred with the relevant requirement and the related organisation procedure in the exposition, where the particular subject matter is described.*
- *as a second element, all functional areas of the organisation in which Part-145 functions are intended to be carried out, including subcontracting, need to be listed with the objective of identifying the applicability of any subject matter in each functional area;*
- *a matrix can be used (refer to **TABLE 1 below**), capturing the two above-mentioned elements. This is intended to be a living document to be customized by the particular organisation depending on its scope of work and structure. This matrix would represent the overall compliance of the audit system and would need to be*

amended, as necessary, based upon any change to applicable regulations, DCA user guides, organisation procedures and functional areas of the organisation (e.g. change of the scope of work to include line maintenance, etc.);

- *The audit plan (**refer to TABLE 2 below**), can be finally presented as a simplified schedule, showing the operational areas of the organisation against a timetable to indicate when the particular area is scheduled for audit and when the audit was completed. The number of product audit and subcontractors audit directly depends on the number respectively of product lines and subcontracted organisations in use. The audit plan should also identify some unannounced audits during on-going maintenance (including unannounced audits during the night for those organisations that work at night);*
- *The audit of each operational area will review all the subject matters which are applicable to the relevant functional area. For each subject matter, the audit should check that the particular Part-145 requirement is documented in the corresponding exposition procedure and that the exposition procedure is effectively implemented in the operational area subject to the audit. In addition, the audit should also identify any practice/process implemented in the particular operational area which has not been documented in any exposition procedure.*

The tables below provide an example (to be further completed) of audit matrix and audit plan for an organisation involved in aircraft base maintenance (2 base maintenance hangars) and line maintenance (2 line maintenance locations)

TABLE 1 – audit matrix (Subject matter- Regulatory reference- Exposition- Functional areas)

Subject Matter	Regulation/User Guide reference	Exposition	FUNCTIONAL AREAS					
			Base Maintenance	Line Maintenance	Quality	Receiving and Storage	Subcontracting	...
Facilities	145.A.25(a)(1)	1.8	X	X		X	X	...
	AMC1 145.A.25(a)	2.22	X	X		X	X	...

Personnel	145.A.30(c)	1.4			X			...
	145.A.30(d)	1.7, 2.22	X	X	X	X	X	...

Record Keeping	145.A.55(a)(1)(1)	...	X	X		X	X	...

Certifying staff	145.A.35(a)	3.9	X	X	X			...

Fabrication of Parts	145.A.42(b)(iii)	1.9, 2.30	X	X		X	X	...
...

TABLE 2 – audit plan

OPERATIONAL AREA	FUNCTIONAL AREA	Planned	Completed	Remarks
Base Maintenance Hangar 1	Base Maintenance	mmm yyyy	dd mmm yyyy	
Base Maintenance Hangar 2	Base Maintenance	mmm yyyy	dd mmm yyyy	
Line Maintenance location 1	Line Maintenance	mmm yyyy	dd mmm yyyy	
Line Maintenance location 2	Line Maintenance	mmm yyyy	dd mmm yyyy	
Quality	Quality	mmm yyyy	dd mmm yyyy	
Store 1,2,3	Receiving and Storage	mmm yyyy	dd mmm yyyy	
Receiving Inspection	Receiving and Storage	mmm yyyy	dd mmm yyyy	
Subcontractor 1	Subcontracting	mmm yyyy	dd mmm yyyy	
Aircraft Base Product audit A320	Base Maintenance	unannounced	dd mmm yyyy	during night shift
Aircraft Line Product audit A380	Line Maintenance	mmm yyyy	dd mmm yyyy	
.....		

3.8.2 Product Audit and inspections

This chapter must describe the procedures related to the product audits (aircraft, aircraft component, engine, specialised service) according to Part-145.

Small organisation may choose to subcontract the audits to another organisation or an outside person with satisfactory technical knowledge and satisfactory audit experience (link to chapter 3.12).

- ☐ Definition of “Product” audit

The sample check of a product means to witness any relevant testing and visually inspect the product and associated documentation. The sample check should not involve repeat disassembly or testing unless the sample check identifies findings requiring such action

- ☐ Company “Product” Audit Policy
 - ☐ A dedicated “Product” audit policy may be added, provided it does not conflict with the one describe in the previous chapter. The Company audit procedure shall include the quality audit of aircraft (and/or component)
- ☐ “Product” Audit programme
 - ☐ Product samples for each line of product (aircraft and / or components and/or engines and/or specialised services)
 - ☐ Dates and timescales
- ☐ “Product” Auditing methods
- ☐ Sampling
- ☐ "Trail" / “investigation” audits
- ☐ Records of “Product” audit reports
 - ☐ Duration (At least duration of 2 years from the date of the findings closure) / location
 - ☐ Type of documents (notification, audit reports, check list, audit programs, ...)

An audit report shall be raised each time a product audit is carried out describing what was checked and the resulting findings against applicable requirements, procedures and products

3.8.3 Audit findings — corrective action procedure

AMC4 145.A.200(a)(6), 145.A.95(a), 145.A.95(b), 145.A.95(c); AMC1 145.A.95; GM1 145.A.95

This chapter must describe the procedures of follow up of corrective actions.

- ☐ Findings classification
 - ☐ Notification to the Accountable Manager and DCA in case of level 1 finding identified by the internal audit and immediate actions to self-limit the approval/privileges as necessary
- ☐ Management of finding due dates
 - ☐ Alert system, finding database
 - ☐ Extension of the due date
 - ☐ Procedure describing the organisation actions when the corrective action deadline has to be postponed or when the answer has not been received on time.
- ☐ Corrective action process

☐ Root cause analysis and associated generation of Corrective Action Plan and Corrective Action Report
A procedure is expected detailing the methodology in use for the root cause analysis, and associated generation of CAP and CAR. It is important that the analysis does not primarily focus on establishing who or what caused the non-compliance, but on why it was caused. Establishing the root cause or causes of a non-compliance often requires an overarching view of the events and circumstances that led to it, to identify all the possible systemic and contributing factors (regulatory, human factors, organisational factors, technical, etc.) in addition to the direct factors. This is an essential element of the compliance monitoring function to avoid recurrent findings. The following describes a typical step by step process

- Collecting information (*environment in which the finding was found, staff involved, associated paperwork, etc.*)
- Identify the root causes and contributing factors (*this means not only identifying and confirming the finding, but also assessing its impact in other areas of the organisations to detect same or similar non compliance and investigating related causes and contributing factors. The 5whys or fishbone methodologies could be used to explore the root causes which brings to the non-compliance*)
- Define a corrective action plan (*the plan should indicate the intended corrective actions and related timing for their implementation, within the due date of each finding. It should address not only the immediate identified non-compliance, but all non-compliances identified as part of the root cause analysis*)
- Demonstrate the implementation of corrective actions (*it means providing evidences that the corrective actions have been effectively implemented. This evidence cannot be based on promises or statement related to events not yet completed. For example, a statement that a certain training will be completed or is on-going is not acceptable as evidence of corrective action implementation*).

- ☐ Corrective action planning and follow-up (e.g. notified, answered, corrective action accepted, open/closed)

Finding follow-up should describe the actions taken by the auditor or auditing manager to verify the implementation of corrective actions.

- ☐ The corrective action plan shall be designed in a way which allows identifying and recording the finding, the root cause, the relevant immediate and long term preventive action with the appropriate timescales.
- ☐ Management responsibilities for corrective action and follow-up
- ☐ Process of corrective actions following findings from the competent authority (*the same principles indicated above in the root cause and CAP/CAR generation are expected. The CAP/CAR shall be performed within the period specified by DCA. Where observations are issued by DCA, the organisation shall give them due consideration and record the decisions taken in respect to those observations*)

- ☐ Description of the quality feedback reporting system

- ☐ Access to Accountable Manager
- ☐ Review of the Compliance Monitoring overall results
- ☐ Meeting with the Accountable Manager. (including record of meeting procedure)
- ☐ Regular meetings to check the progress of corrective actions

The quality feedback reporting system cannot be subcontracted.

3.9 Certifying Staff and Support Staff Qualification and Training Procedures.

145.A.30(e), AMC3 145.A.30(e), 145.A.30(f), 145.A.30(g), AMC 145.A.30(g), 145.A.30(h)1, 145.A.30(h)2, 145.A.30(i), AMC1 145.A.30(h), 145.A.30(j)1, 145.A.30(j)2, AMC1 145.A.30(f), 145.A.35(a), 145.A.35(b), 145.A.35(c), 145.A.35(d), 145.A.35(e), 145.A.35(f), 145.A.35(g), 145.A.35(h), 145.A.35(l), 145.A.35(m), 145.A.35(n), AMC 145.A.35(b), AMC 145.A.35(c), AMC1 145.A.35(d), AMC1 145.A.35(e), AMC1 145.A.35(f), AMC 145.A.35(m), AMC 145.A.35(n), Appendix IV and ICAO Annex I ;

This chapter shall describe qualification procedures for the certifying staff and category B1, B2, B3 support staff qualification. Clear differentiation is expected for each different rating in the scope of work (e.g. aircraft, engines, components, specialised services). Initial and recurrent training in relation of each job function needs to be specified.

3.9.1 Aircraft Certifying Staff and/or Support Staff.

- ☐ The minimum age for certifying staff and support staff is 21 years.
- ☐ Experience, training and competency requirements (including compliance with Part-145 Appendix IV for staff not qualified to Part-66)
- ☐ DCA Part-145 C/S - S/S individual authorisation *: requirements for initial issue, extension (scope of work), renewal, withdrawal of the authorisation, including, as applicable:
 - ☐ "Certification Authorization" for aircraft line/base maintenance certifying staff (cat. A, B1, B2, B3, C as applicable);
 - ☐ Individual authorisation for aircraft base maintenance support staff (B1, B2, B3 as applicable)
- ☐ Recurrent training procedures (Organisation procedures, new technology, human factor issues, etc.)
- ☐ Demonstration of 6/24 months maintenance experience including a table of similar aircraft types (relevant to the scope of work held by the maintenance organisation) to be used for the demonstration of 6/24 months requirement.
- ☐ One-off certification authorisation (CRS procedure following one-off authorisation to be included in MOE 2.16)

The competency assessment process for issuance, extension, and renewal of the DCA Part-145 C/S - S/S individual authorisation is expected to be described in the MOE 3-14 "Competency Assessment".

3.9.2 Components/Engines/APU Certifying Staff.

- ☐ The minimum age for certifying staff and support staff is 21 years.

Experience, training and competency requirements

- ☐ DCA Part-145 C/S individual authorisation: initial issue, extension (scope of work), renewal, withdrawal procedures.

The competency assessment process for issuance, extension, renewal of the DCA Part-145 C/S individual authorisation is expected to be described in the MOE 3.14 "Competency Assessment".

- ☐ Recurrent training procedures (Organisation procedures, new technology, human factor issues, etc..)
- ☐ Demonstration of 6/24 months maintenance experience including criteria to define similarity of engines /components/APUs (relevant to the scope of work held by the maintenance organisation) to be used for the demonstration of 6/24 months requirement.

3.9.3 Specialised Services (NDT) Certifying Staff.

For guidance on how to develop this procedure, refer to the specific standard

3.10 Certifying Staff and Support Staff Records.

145.A.55(d)(1);145.A.55(d)(3);145.A.55(d)(4);145.A.55(d)(5); 145.A.35(j), 145.A.35(k), 145.A.35(h); AMC1 145.A.55(d);

This chapter must describe how the certifying staff records are managed.

- ☐ Constitution of the records including:
 - ☐ Identity, date of birth, DCA Part-145 C/S-S/S individual authorisation reference number, experience, scope of the authorisation, date of issue, validity, copy of the licence, copy of diplomas, copy of training certificate, recurrent training, copy of the DCA Part-145 C/S-S/S individual authorisation, summary sheet, C/S assessment check lists and associated documents / material, ...)
 - ☐ Type of record: electronic or paper copy Management of certifying staff records

- ☐ Retention of records

Personnel records shall be kept for as long as a person works for the organisation, and shall be retained for at least 3 years after the person has left the organisation, or after an authorisation issued to that person has been withdrawn.

- ☐ Duration / location
- ☐ Type of documents
- ☐ Format of the DCA Part-145 C/S-S/S individual authorisation document and authorisation codes
- ☐ procedure to ensure certifying staff may produce their certification authorisation to any authorised person within 24 hours (including line maintenance locations, activities outside the approved locations, etc.)
- ☐ Control of certifying staff records
 - ☐ Authorized persons
 - ☐ DCA personnel
 - ☐ Authorized managers
 - ☐ Delivery of a copy of their DCA Part-145 C/S-S/S individual authorisation in either a documented or electronic format. The scope of work has to be detailed, including limitations when applicable
- ☐ Access to records
 - ☐ C/S-S/S shall be given access on request to their personal records
 - ☐ upon request, the maintenance organisation shall furnish C/S-S/S with a copy of their personal record on leaving the organisation

3.11 Airworthiness Review staff qualification, authorisation and records

This chapter is only applicable to organization with PPB located in Mauritius.

3.12 Compliance monitoring and safety management personnel.

145.A.30(e), AMC3 145.A.30(e);145.A.55(d)(3); 145.A.55(d)(4);

This chapter must describe how the Compliance Monitoring personnel is managed. Initial and recurrent training in relation of each job function needs to be specified.

- ☐ Required experience and competency (professional background and minimum number of audits performed under supervision)
- ☐ Required training including audit techniques, Regulation, MOE and recurrent 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, Lead auditor, etc.)
- ☐ Scope of authorisation for auditors (e.g. Product auditor, System Auditor, NDT auditor, etc.) Authorizations
- ☐ issue, extension, renewal or withdrawal procedures

*Note: the competency assessment process for issuance, extension, renewal of the DCA Part-145 Authorisation is expected to be described in the **MOE 3.19 “Competency Assessment”**.*

- ☐ Independence of quality audit personnel when the organisation uses skilled personnel working within another department than that of Quality
- ☐ Retention of records

Personnel records shall be kept for as long as a person works for the organisation, and shall be retained for at least 3 years after the person has left the organisation, or after an authorisation issued to that person has been withdrawn.

- ☐ Duration / location
- ☐ Type of documents
- ☐ Check that the number of quality personnel remains adapted to the maintenance activity to be supervised (relation with 2.22 Man hour planning).
- ☐ Allocated man-hours (if not full-time employed) shall be addressed.

3.13 Independent inspection staff qualification .

145.A.30(e), AMC3 145.A.30(e);145.A.55(d)(1);145.A.55(d)(3); 145.A.55(d)(4);

This chapter is dedicated to the qualification and authorisation of the “inspectors” which undertake inspection functions and sign-off the related task(s). Initial and recurrent training in relation of each job function needs to be specified.

- ☐ Identification of the various types of Inspectors in the maintenance organisation

The various types of “inspector” personnel, as applicable to the organisation, need to be addressed (e.g. aircraft inspector, component inspector, engine inspector, store receiving inspector, etc.). Clear differentiation is expected for each different ratings in the scope of work (e.g. aircraft, engines, components, specialised services).

It is recommended that a roster listing all maintenance personnel formally authorised to sign-off tasks as “Inspectors” is available in the maintenance organisation under the control of the Compliance Monitoring Manager

They may be authorised:

“EXAMPLE”

- As Aircraft/component/engine inspectors, in order to sign-off (ref. MOE 2.13 table) the tasks performed under supervision (e.g. work performed by trainees)
- As Aircraft/component/engine inspectors, in order to sign-off (ref. MOE 2.13 table) the independent inspection tasks
- As Store incoming inspectors, to perform and attest the receiving inspection of aircraft components/materials as per MOE 2.2 procedure

An Aircraft/component/engine inspectors is not authorised to issue a release to service for aircraft or component or engine, unless he/she is also holding a "certifying staff privilege".

In the aircraft base maintenance environment the inspectors function does not correspond to the support staff function. After the task sign-off, a further inspection stage is necessary by B1, B2, B3 Support staff as applicable. Support Staff shall ensure that all relevant tasks or inspections have been carried out to the required standard before the category C certifying staff issues the certificate of release to service.

When the staff is holding more than one authorisation (e.g. mechanic, inspector and certifying staff), the different authorisations shall be clearly distinguished. A person may be at the same time:

"EXAMPLE"

- airframe mechanic on the A320(CFM56), B777 (GE90) and ERJ-170 (GE CF34);
- airframe inspector on the A320(CFM56) and B777 (GE90);
- holding a certification authorisation as certifying staff only for the B777 (GE90);

Experience, training and competency requirements Aeronautical and practical Experience,

- ☐ General Training (FTS, CDCCL, EWIS when needed and Human Factor, MOE, standard practices,...) Specific
- ☐ training requirements applicable to the scope of activity (aircraft, engine, store etc.) Knowledge of the
- ☐ language in which the maintenance approved data are written.
- ☐ Authorizations issue, extension, renewal or withdrawal procedures including scope of authorisation

The competency assessment process for issuance, extension, renewal of the DCA Part-145 Authorisation is expected to be described in the **MOE 3.19 "Competency assessment of personnel"**.

- ☐ Recurrent training procedures including
 - ☐ Training Programme (MOE and associated procedures, PART-145, HF, special requirements, ...)
 - ☐ Training setting up
 - ☐ Duration, intervals Retention of records

Personnel records shall be kept for as long as a person works for the organisation, and shall be retained for at least 3 years after the person has left the organisation, or after an authorisation issued to that person has been withdrawn.

- ☐ Duration / location
- ☐ Type of documents

3.14 Mechanics qualification and records.

145.A.30(e), AMC3 145.A.30(e);145.A.55(d)(3); 145.A.55(d)(4);

This chapter shall refer to the different specialities of mechanics (e.g. airframe mechanics, powerplant mechanics, avionics, sheet metal workers, cabin, fuel, engines, painters, welders, cleaners, components, NDT staff, composites, line maintenance, ...), as applicable to the organisation. Those personnel have to be considered authorised by the

maintenance organisation approved under Part-145 to sign-off³⁰ tasks that they have personally performed. Consistency shall be ensured with the sign-off policy described in MOE chapter 2.13. An authorised mechanic is not authorised to issue a release to service for aircraft or component or engine or NDT, unless he/she is also holding a “certifying staff privilege”. Initial and recurrent training in relation of each job function needs to be specified.

- ☐ Identification of the various types of Mechanics in the maintenance organisation

It is recommended that a roster listing all maintenance personnel formally authorised to sign-off tasks as “Mechanics” is available in the maintenance organisation under the control of the Compliance Monitoring Manager.

When the staff is holding more than one authorisation (e.g. mechanic, inspector and certifying staff), the different authorisations shall be clearly distinguished.

A person may be at the same time:

“EXAMPLE”

- *airframe mechanic on the A320(CFM56), B777 (GE90) and ERJ-170 (GE CF34);*
- *airframe inspector on the A320(CFM56) and B777 (GE90);*
- *holding a certification authorisation as certifying staff only for the B777 (GE90);*

Clear differentiation is expected for each different rating in the scope of work (e.g. aircraft, engines, components, specialised services)

- ☐ Experience, training and competency requirements Aeronautical and practical Experience,
- ☐ General Training (FTS, CDCCL, EWIS when needed and Human Factor, MOE, standard practices,...) Specific
- ☐ training requirements applicable to the scope of activity (aircraft, engine, etc.) Knowledge of the language in
- ☐ which the maintenance approved data are written.
- ☐ Authorizations issue, extension, renewal or withdrawal procedures including scope of authorisation

The competency assessment process for issuance, extension, renewal of the DCA Part-145 Authorisation is expected to be described in the MOE 3-19 “Competency Assessment”.

- ☐ Recurrent training procedures including
 - ☐ Training Programme (MOE and associated procedures, PART-145, Human Factors, specific technical requirements, ...)
 - ☐ Training setting up
 - ☐ Duration, intervals

- ☐ Retention of records

Personnel records shall be kept for as long as a person works for the organisation, and shall be retained for at least 3 years after the person has left the organisation, or after an authorisation issued to that person has been withdrawn.

- ☐ Duration / location
- ☐ Type of documents

³⁰ A “sign-off” is a statement by the competent person performing or supervising the work, that the task or group of tasks has been correctly performed. A sign-off relates to one step in the maintenance process and is therefore different from the release to service of the aircraft

3.15 Process for exemption from aircraft/aircraft component maintenance tasks.

145.A.65(b)1, GM2 145.A.65(b)(1)

This chapter must describe the procedures of the organisation regarding exceptional authorisations related to maintenance tasks. Deviations have to be requested by the operator to its competent authority or granted by the operator in accordance with a procedure acceptable to its competent authority. The contract between the operator and the maintenance organisation shall specify the support the Part-145 approved organisation may provide to the operator in order to substantiate the deviation request. This chapter is to be considered applicable only under these circumstances.

- ☐ System for control and processing with the competent authority which includes:
 - ☐ Support the maintenance organisation may provide to the operator/customer in order to substantiate a deviation request from the maintenance programme (e.g. one time extension of task interval due to unavailability of tools, materials, parts, etc.)

Deviations from the maintenance programme have to be managed by the CAMO. The contract between the maintenance organisation and the CAMO should specify the support expected by the maintenance organisation on this regard. This MOE chapter is to be used to detail the policy in place on this matter, while dedicated procedures applicable to each customer operator should be included in MOE Part-4 or is separate interface documents.

- ☐ Relations with the operator/ customer in case of derogation for an intervention in progress by the workshop
- ☐ Supply to the customer/ operator of information enabling to write out requests for exceptional authorisation applications.
- ☐ Control of the approval by the competent authority (linked with CRS)

The difference between the activity study/ preparation/ redaction/ submission of exceptional authorisation application related to maintenance tasks on behalf of customers/ operator and the PART-145 activity here above should be kept in mind.

3.16 Concession Control for Deviation from the Organizations' Procedures.

AMC 145.A.65(b)

This chapter must describe the procedures followed by the maintenance organisation in order to deviate from the approved MOE procedures.

It shall be understood that any request for concession to deviate from an MOE procedures shall be anyway in compliance with any regulatory requirement with particular reference to DCA Part-145. Under no circumstances this chapter may be used to deviate from regulatory requirements.

- ☐ Concession criteria
 - ☐ Object, procedures involved, justifications, compensatory conditions, period of validity, etc.
- ☐ Concession management procedure
 - ☐ Internal evaluation
 - ☐ Drafting process
 - ☐ Response
 - ☐ Internal validation process and follow-up System of approval and control of concession
- ☐ Feedback from the Compliance Monitoring to DCA

Any concession shall be approved by DCA.

3.17 Qualification Procedure for Specialised Activities Such as NDT, Welding, etc.

145.A.30(f), AMC1 145.A.30(f), AMC 145.A.65(b)(2), AMC1 145.A.30(e), GM2 145.A.30(e), GM3 145.A.30(e), AMC3 145.A.30(e);145.A.55(d)(3); 145.A.55(d)(4);

This chapter shall refer to the qualification of specialised services staff such as defined in AMC 145.A.30 (f). It shall apply to all the specialised services mentioned in MOE paragraph 1.9.4 (e.g. NDT, painting, welding, machining, NDI).

It is recommended to structure this chapter to provide qualification requirements for each group of specialised services staff in a separate paragraph. Initial and recurrent training in relation of each job function needs to be specified.

3.17.1 NDT personnel

The organisation shall develop a NDT written practice detailing the NDT qualification and certification programme.

This chapter shall detail the procedures for the issue of an NDT sign-off authorisation.

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

- ☐ Identification of the various types of specialised activities personnel in the maintenance organisation

The organisation shall include the qualification process for each specialised activity (refer to the list of topics indicated for NDT staff qualification procedure). The qualification process should be based on international industry standards and/or manufacturer published standards.

3.18 Management of External Working Teams.

145.A.47(d), GM1 145.A.47(d) 145.A.75(b), AMC1 145.A.75(b), AMC1 145.A.10, 145.A.55(a)(1)(1); 145.A.205

This chapter shall refer to the role of outside teams acting in the premises of the organisation to carry out a maintenance task on an aircraft/ engine/ component in the scope of a task under the responsibility of the organisation. The organisation shall ensure the contracted or subcontracted activities performed by external working team will be subject to hazard identification and safety risk management (link with MOE 3.1).

The organisation shall describe the management of the arrangements/ contracts with the external organisations.

3.18.1 External Team Working under their own DCA Part-145 Approval .

In this case at the end of the work, the external team will issue their own CRS for the work done (aircraft CRS or DCA Form 1, as applicable).

- ☐ Segregation between the two maintenance organisations working in the same premises
- ☐ Clear work order provided to the external working team
- ☐ Type of support (tools/equipment, facilities,...) made available to the External Team Working
- ☐ Management of the progress of work (meetings, etc.)
- ☐ DCA Part-145 release to service to be expected from the working team

3.18.2 External Working Team not holding an DCA Part-145 Approval.

In this case, the external working team shall be considered as a "Subcontractor" and the applicable procedures developed in MOE chapter 2.1 shall be followed. The Organisation shall be listed in MOE 5.2 together with the scope of authorisation.

- ☐ Control of the Subcontractor
- ☐ System for control of materials, tools, working instructions and procedures
- ☐ System for control of documentation such as drawings, modification, repairs instructions

Management of the progress of work (meetings, etc)

- ☐ Certification procedure for work performed by the outside team such as: repair, replacement, modification, overhaul, test, inspection.
- ☐ Environmental conditions ☐ Final certification
- ☐ Training on the internal procedures to external staff

3.19 Competency Assessment of Personnel.

145.A.30(a)3, 145.A.30(b)3, 145.A.30(e) , AMC1 145.A.30(a), AMC1 145.A.30(e) , AMC2 145.A.30(e), AMC5 145.A.30(e) , AMC4 145.A.30(e), GM2 145.A.30(e), GM3 145.A.30(e), 145.A.35(a), AMC1 145.A.35(a), Appendix IV to AMC 145.A.30(e)

This chapter applies to all maintenance personnel involved in the DCA Part-145 activities (management personnel, certifying staff, mechanics, inspectors, quality auditor, engineering staff, production planning staff, store inspectors, tools administrators, purchasers, etc.).

The qualification requirements to be assessed for each category of staff (being different from one to the other staff category) is expected to be found in the relevant MOE chapter (e.g. chapter 3.9 in case of Certifying/Support staff, chapter 3.12 for quality auditor, chapter 3.14 for mechanics, chapter 3.13 for inspectors, etc.)

- ☐ Management of competency assessment
 - ☐ Assessment procedures for initial , extension and renewal of an authorisation (process/method used)
 - ☐ Person responsible for this process on behalf of the Organisation
 - ☐ When the assessment shall take place
 - ☐ Assessors
 - ☐ Commission/ examination
 - ☐ Actions to be taken when the assessment is not satisfactory.
- ☐ The competency assessment shall include:
 - ☐ Verification that all the applicable qualification requirements for the specific category of staff as detailed in the relevant MOE chapter/Job Description (e.g. 3.9 in the case of certifying staff, etc.) are met
 - ☐ Verification of the competencies listed in the GM2 145.A.30 (e) and include verification of:
 - ☐ relevant knowledge skills and experience on the product/technical area as applicable to the job function
 - ☐ appropriate attitude towards safety and observance of procedures
 - ☐ knowledge of the procedures (e.g. handling and identification of components, MEL use, etc.) as applicable to the job function
- ☐ The competency assessment shall be based on:
 - ☐ Review of personnel records
 - ☐ Interview
 - ☐ evaluation of competency “On-the-Job performance” and/or testing of knowledge by appropriately qualified staff (e.g. in the case where the assessment is related to a new activity for which the maintenance organisation is not yet approved such as a new aircraft type, new component, new maintenance level, etc.),
- ☐ Assessment records

- ☐ Location
- ☐ Type of documents

Clear identification of the scope of the assessment (initial, extension or renewal of an DCA Part-145 C/S-S/S individual authorisation). This means for example:

“EXAMPLE”

- *For aircraft certifying staff, which is/are the category(s) (e.g. B1 line maintenance certifying staff, B1 base maintenance support staff, C base maintenance certifying staff, A line maintenance certifying staff, etc.) and which is/are the aircraft type (s) being assessed for endorsement in the authorisation (initial or extension of privileges);*
- *For components certifying staff, which is/are the rating(s) (e.g. C14, C6, C5, etc.) and the specific components associated to each rating (e.g. Landing Gears P/Nl, Battery P/N, etc.) being assessed for endorsement in the authorisation (initial or extension of privileges);*
- *For quality auditor, which is the scope of the auditor authorisation (e.g. system/procedures or product audit)*
- *Etc.,*

- ☐ upon request, the maintenance organisation shall furnish any staff with a copy of their personal records on leaving the organisation (for C/S-S/S also refer to MOE 3.9).

A template is available in GM 3 145.A.30(e) which may be used to record the professional experience gained and the training received in the maintenance organisation. This document can be provided to staff when leaving the organisation (together with associated evidences, such as training certificates/experience logbooks, etc.), and be considered during the competency assessment of the individual in another organisation.

- ☐ Procedure to take credit of experience/training for new maintenance personnel joining the maintenance organisation (ref. GM 3 145.A.30(e))
- ☐ Procedure to assess the need of EWIS training for the various categories of maintenance personnel, when applicable to the scope of approval of the organisation

DCA guidance is provided for EWIS training programme to maintenance organisation personnel in AMC 20-22

- ☐ Procedure to assess the need of Fuel Tank Safety training for the various categories of maintenance personnel, with particular reference to those involved in the compliance of CDCCL tasks, when applicable to the scope of approval of the organisation

DCA guidance is provided for training programme in Appendix IV to AMC to 145.A.30(e) and 145.B.200(3)

3.20 Training procedures for on-the-job training as per Section 6 of Appendix III to Part-66.

Reserved.

3.21 Procedure for the issue of a recommendation to the competent authority for the issue of a Part-66 licence in accordance with 66.B.105

Reserved.

3.22 Management System record keeping

145.A.55(a)(3), 145.A.55(c), 145.A.200(a),145.A.200(b), 145.A.200(c), GM1 145.A.200, 145.A.200(a)(5); GM1 145.A.200(a)(5);

This paragraph should describe the management system record-keeping process. The organisation shall ensure that the

following records are retained:

- *Records of management system key processes;*
- *Contracts, both for contracting and subcontracting;*

Management system records, shall be kept for a minimum period of 5 years.

It should include the following details:

- ☐ Definition of records to be stored and format;
- ☐ Storage type, location and accessibility;
- ☐ Responsibilities;
- ☐ Access to records;
- ☐ Retention periods;
- ☐ Storage procedure and preservation of records;
- ☐ Subcontracting record storage
- ☐ Facility management, including third party facilities
- ☐ Storage of electronic records
- ☐ Electronic safeguards and remote servers
- ☐ Transfer of records
- ☐ Management of records in specific circumstances (e.g. accidents)

PART 4- RELATIONSHIP WITH CUSTOMER/ OPERATORS.

This MOE Part is to be considered applicable only when the Organisation is holding a maintenance contract for aircraft covered by the Basic Regulation and this part is intended to cover any operator peculiar requirement which has to be endorsed in the MOE for the purpose of being used in the performance of maintenance (e.g. how to acquire the necessary information for removal of serviceable components, etc.). It is recommended to have a separate procedure for each customer operator.

*When the organisation is performing line maintenance for a customer operator limited to an IATA Standard Ground Handling Agreement, this part is not applicable and the line maintenance procedures to be followed are the one indicated in the **MOE Part L2** plus any other line maintenance procedure directly provided by the customer operator (e.g. Operator line station manual).*

4.1 List of the commercial operators to which the organisation provides regular aircraft maintenance services.

145.A.70(a)13

This chapter must list those operators for whom maintenance is provided on regular basis, with details of the types of aircraft (and/or engines/APU) and the scope of work undertaken, e.g. Base maintenance, Line maintenance, Defect rectification etc., with any limitations.

4.2 Customer interface procedures and paperwork.

145.A.65(b)1, GM2 145.A.65(b)(1), GM1 145.A.70(a), 145.A.60(d), 145.A.65(b)1, 145.A.55(a)(2), 145.A.55(a)(3)1, 145.A.55(a)(3)2, 145.A.55(a)(3)3

4.2.1 Customer interface procedures.

This paragraph must describe for each contracting operator, the special mode of operation (procedures/ documents/ exchange of information, planning meetings, technical, quality, reliability) between the organisation and its customer.

- ☐ Need to receive training on customer operator procedures
- ☐ Procedure to ensure correct completion of customer provided work cards (e.g. training on customer paperwork, etc.)

4.2.1 Customer paperwork.

This paragraph must describe (for each contracted operator) how the organisation:

- ☐ Completes operator's log books
- ☐ Keeps the operator's technical records Retains records on behalf of the operators Communicates with the
- ☐ operator

PART 5 SUPPORTING DOCUMENTS

5.1 Sample Documents.

AMC1 145.A.70(a)

This chapter must list all the documents and forms in use by the organisation. Each form shall be uniquely identified with a number and revision date to allow traceability of changes

“EXAMPLE”

- ☐ Request to DCA for approval of an Exposition amendment Request to DCA for acceptance of a Capability List
- ☐ change Material tags: Serviceable, Unserviceable and Scrap labels Tooling identification tag
- ☐ Maintenance Task Card (Scheduled Maintenance) Maintenance Task Card (Additional Defects)
- ☐ Base Maintenance CRS Line Maintenance CRS DCA Form 1
- ☐ Quality Audit Report Form
- ☐ Quality Audit Corrective Action Report Form Personnel Training Record
- ☐ DCA Part-145 C/S-S/S individual authorisation Concession Application and Approval

5.2 List of Subcontractors as per point 145.A.75(b).

145.A.70(a)14

This chapter must list the subcontractors (not holding an DCA Part-145 approval)- linked with MOE chapter 2.1, 2.2 The list of subcontractors list shall include the following minimum information:

- *Name of the Subcontracted Organisation;*
- *Locations(s) where subcontracted activities are carried out;*
- *Activities which are subcontracted;*

5.3 List of Line Maintenance Locations as per point 145.A.75 (d)

145.A.70(a)15, 145.A.75(d)

This chapter must list the line station locations – linked with MOE chapter 1.8 and 1.9 – (airport and addresses)

5.4 List of Contracted Organisations as per point 145.A.70(a)(16).

145.A.70(a)16

This chapter must provide the list of contracted organisation (holding an DCA Part-145 approval relevant to the maintenance activity contracted)- linked with MOE chapter 2.1, 2.2.

5.5 List of used alternative means of compliance as per point 145.A.70(a)(17)

145.A.70(a)(17); 145.A.120(a)/(b);

This chapter should include the list of alternative means of compliance currently approved/used and it is only applicable when the MOE 1.12 includes a procedure to develop AltMoC.

- ☐ Content of the list.

This list must include at least the following main information, as applicable:

- *Title of the approved alternative means of compliance*
- *Reference of the approved alternative means of compliance;*
- *Date of approval*

PART 6 RESERVED

This part is reserved.