



Foreign Part 145 approvals User guide for Maintenance Organisation Exposition	Doc # Approval Date	UG.CAO.00024-001 14/07/2010
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## Foreign Part 145 approvals

### **UG.CAO.00024-001**

	Name	Validation	Date
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Foreign Part 145 approvals User guide for  
Maintenance Organisation Exposition

Doc #

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**DOCUMENT CONTROL SHEET**

<b>Process Area</b>	Organisation approval
<b>Main Process</b>	Continuing Airworthiness Organisation Approval
<b>Scenario</b>	Foreign Part 145 approval
<b>Process</b>	All
<b>Main Process Owner</b>	Karl SPECHT

**Reference documents****a) Contextual documents**

Commission Regulation (EC) 2042/2003 - Regulation of 20 November 2003 laying down implementing rules for the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L315, 28.11.2003)

Commission Regulation (EC) 216/2008 - Regulation of European Parliament and of Council of 20 Feb. 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency and repealing Council Directive 91/670/EEC, Regulation (EC) 1592/2002 and Directive 2004/36/EC

Commission Regulation (EC) 593/2007 - Regulation of 31 May 2007 on the fees and charges levied by the European Aviation Safety Agency Regulation (OJ L140, 01.06.2007)

EASA/FAA MIP - Maintenance Implementation Procedure (Applicable only to US Part 145 Approvals)

EASA/TCA AAM - Administrative Arrangement on Maintenance (Applicable only to Part 145 Canadian Approvals)

ED Decision 2003/19/RM - On AMC and GM to Commission Regulation (EC) 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks

ED Decision 2007/019/R - On the "general Acceptable Means of Compliance for Airworthiness Product, Parts and Appliances (AMC20)".

EU/CAN BASA - Bilateral Aviation Safety Agreement (Applicable only to Part 145 Canadian Approvals)

EU/USA BASA - Bilateral Aviation Safety Agreement (Applicable only to US Part 145 Approvals)

MB decision 10-2007 - MB decisions No 10/2007 on outsourcing of tasks to NAAs or Qualified entities.

**b) Internal documents**

FO.TCC.00022-001 - Part 145 assignment request

IC - Part 145 - CL F5 01 "Foreign Part 145 Initial Approval check list"

UG.CAO.00005-001 - Foreign Part 145 approvals User guide for NAA / EASA

UG.CAO.00006-001 - Foreign Part 145 approvals - User guide for Applicants

WI.CAO.00004-001 - Foreign Part 145 approvals - Technical investigation process

WI.DRM.00017-001 - CAO records management

**Log of issues**

Issue	Issue date	Change description
001	14/07/2010	First issue



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## 1. Scope

This user guide for the compilation of a Maintenance Organisation Exposition (MOE) for Foreign EASA Part 145 Approval is complementary to the requirements of Implementing Rule - Regulation EU 2042/2003 Annex II, Part-145 “as amended” and does not supersede or replace the information defined within this document.

## 2. Important warning

This user guide is designed to be used by:

- Part 145 Maintenance Organisations - To assist them in the production of their own MOE.
- Competent Authority - As a comparison document for MOEs submitted to them for approval.

The user guide is provided for guidance only and should be customised by each organisation to demonstrate how they comply with Part 145. The organisation may choose to use another format as long as all the applicable sections of the regulation are addressed and cross-referenced.

For each detailed procedure described within the MOE, the Part 145 organisation should address the following 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 MOE should be available in the English language however, it may also be written in a second language (English and the language of the country where the organisation is located) provided that the overseeing competent authority has agreed and EASA has finally accepted. In the case the MOE is written in English and in a second language, the English version shall prevail.

The AMC 145.A.70 (a) (3) states: “When an organisation uses a different format, for example, to allow the exposition to serve for more than one approval, .....”

This AMC has to be read in conjunction with the EC 2042/2003 Article 1, thereby limiting the use of the EASA Part 145 MOE for approvals covered by the Basic Regulation. As a consequence the EASA MOE shall not make reference to any national approval and must be exclusively dedicated to EASA Part 145.

## 3. Exposition format

The MOE may be produced in hardcopy or electronic format;

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

## 4. Structure of the Maintenance Organisation Exposition

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

- Single document: The standard MOE produced i.a.w. AMC 145.A.70 (a) is a unique and complete document. It must contain all the information required to show compliance with the regulation including detailed maintenance procedures and detailed quality system procedures (see AMC 145.A.70 (a)).



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- Several documents: The MOE must contain at least the information as detailed in AMC 145.A.70 (a) 1.1 to 1.11 (Management). The additional material may be published in separate documents which must be referenced from the MOE. In this case.
- The MOE should cross refer to the associated procedures, documents, appendices, forms and all other lists which are managed separately (e.g. the list of certifying staff, the capability list and the list of sub-contractors).
- These associated documents must meet the same rules as described for the MOE.
- This/these associated document(s), procedure(s) and form(s) etc. should be provided to and approved by the competent authority (as part of the MOE).

For some organisations certain sections of the headings defined within AMC 145.A.70 (a) may be 'not applicable'. In this case they should be annotated as such within the MOE.

## 5. Exposition pages presentation

Each page of the MOE should be identified as follows (this information may be added in the header or footer;

- the name of the organisation (official name as defined on the EASA Form 3 approval certificate)
- the issue number of the MOE
- the amendment/revision number of the MOE
- the date of the revision (amendment or issue depending on the way the organisation has chosen to revise the MOE)
- the chapter of the MOE
- the page number
- the name of the document "Maintenance Organisation Exposition"

At the beginning of the volume, the first page should specify:

- Part 145 Maintenance Organisation Exposition;
- The name of the organisation (the official one defined on the EASA Form 3 approval certificate)
- The address, telephone, fax numbers and e-mail address of the Head Office
- The copy number from the distribution list
- The approval reference of the PART 145 organisation

## 6. CORPORATE COMMITMENT BY ACCOUNTABLE MANAGER

Prior to submission of the 'draft' MOE to the competent authority for approval the Accountable Manager must sign and date the Corporate Commitment statement (Management 1.1). This confirms that they have read the document and understand their responsibilities under the approval. In the



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case of change of Accountable Manager the new incumbent should sign the document and submit a suitable amendment to their competent authority for approval.



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# PART 0 - INTRODUCTION

## 0.1 Table of Contents

For standardisation purposes and to facilitate the production of the MOE by the Part 145 maintenance organisation EASA recommends adoption of the following format for the MOE as per AMC 145.A.70 (a). The maintenance organisation should customise the document to suit their organisation and may add pages/paragraphs as necessary.

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Where a Part is not used it should be shown in the Exposition as [Not Applicable](#).



## 0.2 List of Effective Page

(Example)

Page Number	Date of Issue	Revision	Page Number	Date of Issue	Revision
<b>PART 0</b>			121	01 January 07	Rev. 1
001	19 December 06	Rev. 0	122	01 January 07	Rev. 1
002	19 December 06	Rev. 0	<b>PART 2</b>		
003	19 December 06	Rev. 0	201	19 December 06	Rev. 0
004	01 January 07	Rev. 1	202	19 December 06	Rev. 0
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006	01 January 07	Rev. 1	204	19 December 06	Rev. 0
007	19 December 06	Rev. 0	205	19 December 06	Rev. 0
008	01 January 07	Rev. 1	206	19 December 06	Rev. 0
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010	01 January 07	Rev. 1	208	01 January 07	Rev. 1
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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	19 December 06	Rev. 0	L203	19 December 06	Rev. 0
104	01 January 07	Rev. 1	L204	19 December 06	Rev. 0
105	01 January 07	Rev. 1	<b>PART 3</b>		
106	19 December 06	Rev. 0	301	01 January 07	Rev. 1
107	01 January 07	Rev. 1	302	01 January 07	Rev. 1
108	01 January 07	Rev. 1	303	01 January 07	Rev. 1
109	19 December 06	Rev. 0	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	<b>PART 4</b>		
115	01 January 07	Rev. 1	401	01 January 07	Rev. 1
116	19 December 06	Rev. 0	402	01 January 07	Rev. 1
117	19 December 06	Rev. 0	403	01 January 07	Rev. 1
118	19 December 06	Rev. 0	<b>PART 5</b>		
119	19 December 06	Rev. 0	501	01 January 07	Rev. 1
120	19 December 06	Rev. 0	502	19 December 06	Rev. 0

*This list of issue/amendments should allow traceability from the previously approved version.*

*The name of the organisation, the date of approval and the name of the person who has approved the MOE should be included.*





### 0.3 List of issues / amendments

(Example)

Amendment / issue Number	Amendment / issue Date	Amendment / issue Type
Initial	19 December 06	major
Revision 1	01 January 07	minor

Amendment number **Revision 1** dated **01 January 07**

This issue/ amendment has been internally reviewed by: **(name & position)**

Date of review: **20 January 2007**



## 0.4 Distribution List

(Example)

MOE COPY NUMBER	MOE HOLDER	FORMAT
Copy No. 1	Accountable Manager	CD-ROM
Copy No. 2	Engineering Director	PAPER
Copy No. 3	Aircraft Maintenance Manager	CD-ROM
Copy No. 5	Workshop Maintenance Manager	CD-ROM
Copy No. 5	Quality Manager	PAPER
Copy No. 6	Overseeing authority	PAPER
Copy No. 7	Reserved	
Copy No. 8	Reserved	



# PART 1 - MANAGEMENT

## 1.1: Corporate Commitment by the Accountable Manager

Part 145.A.30 (a) (c) (e) (g) / AMC 145.A.30 (a) - Part 145.A.70 (a) / AMC 145.A.70 (a) GM 145.A.70 (a) - Part 145.A.90 (a)

This Exposition and any associated referenced manuals define the organisation and procedures upon which EASA Part 145 approval is based as required by Part 145.A.70

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

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

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

Signed \_\_\_\_\_

Dated \_\_\_\_\_

Accountable Manager \_\_\_\_\_ (quote position) \_\_\_\_\_

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

*According to PART 145.A.70 (a) 1, if the Accountable Manager is not the highest level responsible of the organisation, the latter must then countersign the statement.*

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

*This statement is a copy of the text given in GM 145.A.70 (a).any modification to the statement must not alter its intent.*



## 1.2: Quality and Safety Policy

Part 145.A.30 (a) - Part 145.A.65 (a) / AMC 145.A.65 (a) - Part 145.A.70 (a) 2

The Quality and Safety Policy should, as a minimum, include a statement committing the organisation to:

- Apply human factors principles.
- Encourage personnel to report maintenance related errors/incidents to meet Part-145 requirements.
- Recognise safety as a prime consideration at all times for all the staff.
- Recognise that compliance with procedures, quality standards and regulations is the duty of all personnel.
- Recognise the need for all personnel to cooperate with the quality auditors.
- Ensure that safety standards are not reduced by commercial imperatives.
- Ensure good use of resources and pay particular attention to carry out correct maintenance at the first attempt.
- Train all organisation staff to be aware of human factors and set a continuous training programme in this field.

## 1.3 Management Personnel

Part 145.A.30 (b) 1, 2, 3, 4, (c) / AMC 145.A.30 (b) 1,2,7,8 - Part 145.A.70 (a) 3

The titles and names of the senior persons mentioned in PART 145.A.30 (b) should be shown in an organisation chart (as applicable):

- Accountable Manager. *Even if a Form 4 is not mandatory for the Accountable Manager the issuance of such a form remains the easiest way to demonstrate his knowledge of Part 145.*
- Quality Manager
- Aircraft Maintenance Manager(s) (base and line)
- Workshop maintenance Manager { component or engine / APU maintenance manager(s)}
- Responsible Level 3 for NDT
- Engineering Director
- According to § 145.A.30 (b) 4, the M.O.E must also define who deputises for any senior person in case of lengthy absence. *Every nominated deputy should be able to demonstrate to the authority similar level of qualification and experience. Issuance of deputy Form 4 is recommended.*

*This list comprises the minimum Senior Personnel in a medium to large organization, for which the EASA would require an EASA Form 4 to be completed (As specified in AMC 145.A.30 (b) 2). An EASA Form 4 for the responsible level 3 for NDT is not mandatory but should be completed for easier evaluation of his knowledge and qualification.*

*According to PART 145.A.30 (b) and AMC 145.A.30 (b) 2, 8, each nominated person must report ultimately to the Accountable Manager (directly or via either the base maintenance manager, the line maintenance manager, the workshop manager or the quality manager). The Quality manager should directly report to the Accountable manager.*



## 1.4 Duties and Responsibilities of Management Personnel

Part 145.A.30 (a) 1, 2, 3 (c) / AMC 145.A.30 (a) (b) 3,4,5,6 (c) - Part 145.A.35 (i) / AMC 145.A.35 (a) 2 - AMC 145.A.45 (d) - Part 145.A.65 (a) (c) 2 / AMC 145.A.65 (a) (c) (2) (4) - Part 145.A.70 (a) 1, 2 - Part 145.A.90 (a)

The responsibilities and duties regarding Part 145 must be detailed in this paragraph:

### 1.4.1 Accountable Manager

- The Accountable Manager is responsible for ensuring that maintenance carried out by the approved organisation meets the standards required by EASA.
- He/she is responsible for establishing and promoting the safety and quality policy specified in Part 145.A.65 (a).
- He/she is responsible for nominating the management staff.
- He/she is responsible for 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.
- He/she is responsible for the supervision of the progress of the corrective actions/review of the overall results in terms of quality.
- He/she is responsible for ensuring the competence of all personnel including management personnel has been assessed.
- He/she is responsible for ensuring that any charges are paid, as prescribed by EASA i.a.w. the fees & charge regulation.

*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.*



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### 1.4.2 Quality Manager

- The Quality Manager is responsible for establishing an independent quality assurance system to monitor compliance of the Part 145 organisation with EASA requirements.
- He/she shall have direct access to the Accountable Manager on matters concerning the quality system.
- Defines the human factors principles to be implemented within the organisation.
- He/she is responsible for implementing a quality audit programme in which compliance with all maintenance procedures is reviewed at regular intervals in relation to each type of aircraft (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.
- He/she is responsible for follow up and closure of any non conformances identified.
- The Quality Manager should establish regular meetings with the Accountable Manager to appraise the effectiveness of the quality system. This will include details of any reported discrepancy not being adequately addressed by the relevant person or in respect of any disagreement concerning the nature of a discrepancy.
- He/she is responsible for preparing standard practices and procedures (MOE, including the associated procedure(s) for use within the organisation and ensuring their adequacy regarding Part 145 and any amendments to the Regulation.
- He/she is responsible for submission of the MOE and any associated amendments, to the competent authority for approval (which includes completion of and submission of EASA Form(s) 2, EASA Form(s) 4 or equivalent).
- He/she is responsible for assessing suppliers of new and used components and materials for satisfactory product quality in relation to the needs of the organisation.
- He/she is responsible for issue /renewal/cancellation of certifying staff authorisations (possible to delegate tasks).
- He/she is responsible for defect analysis in respect of aircraft undergoing maintenance so that any adverse trends are identified and addressed effectively and promptly.
- He/she is responsible for establishing feedback from maintenance incidents/issues and feeding these back into the continuation training programme.
- He/she is responsible for assessing contractors working under the quality system and maintaining the expertise necessary to be able to do so, to the satisfaction of EASA. He/she is also responsible for assessing external specialist services required to be used by the organisation in the performance of maintenance.

*It must be remembered that the quality system is required to be "independent" which will normally mean that the Quality Manager and the Quality Monitoring Staff are not directly involved in the maintenance process or with maintenance certification.*



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### 1.4.3 Aircraft and/ or Workshops Maintenance Manager:

- 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).
- He /she is responsible for ensuring that the organisation's procedures and standards are complied with when carrying out maintenance.
- He /she is responsible for ensuring the competence of all personnel engaged in maintenance by establishing a programme of training and continuation training using internal and/or external sources.
- He /she is responsible for ensuring that all sub-contract orders are correctly detailed and that the requirements of the contract/order are fulfilled in respect of inspection and quality control.
- He /she is responsible for responding to quality deficiencies in the area of activity for which he/she is responsible, which arise from independent quality audits.
- He /she is responsible for 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 EASA
- He/she is responsible for the implementation of the safety policy and human factor issues

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

### 1.4.4 Other section manager as determined by the organisation (may include the Engineering Manager)

- He /she is responsible for availability of facilities appropriate to the planned work including hangars, workshops office accommodation, stores as applicable for the planned work.
- He /she is responsible for availability of a working environment appropriate to the tasks being undertaken.
- He /she is responsible for availability of tools, equipment and materials to perform the planned tasks.
- He /she is responsible for availability of sufficient competent personnel to plan, perform, supervise, inspect and certify the work being performed.
- He /she is responsible for availability of all necessary maintenance data as required by Part 145.A.45.
- He /she is responsible for notifying the Accountable Manager whenever deficiencies emerge which require his attention in respect of finance and the acceptability of standards (Accountable Manager and Quality Manager to be officially informed of any lack of 25% of available man-hours over a calendar month).
- He/she is responsible for the implementation of the safety policy and human factor issues as well as reporting of un-airworthy conditions.
- He /she is responsible for supplying the necessary technical documents for customers and storage of the organisation's technical records.
- He /she is responsible for ensuring the competence of all personnel engaged in maintenance by establishing a programme of training and continuation training using internal and external sources (other field than base maintenance).
- He /she is responsible for the satisfactory completion and certification of all work required by contracted operators/customers, in accordance with the work specification.



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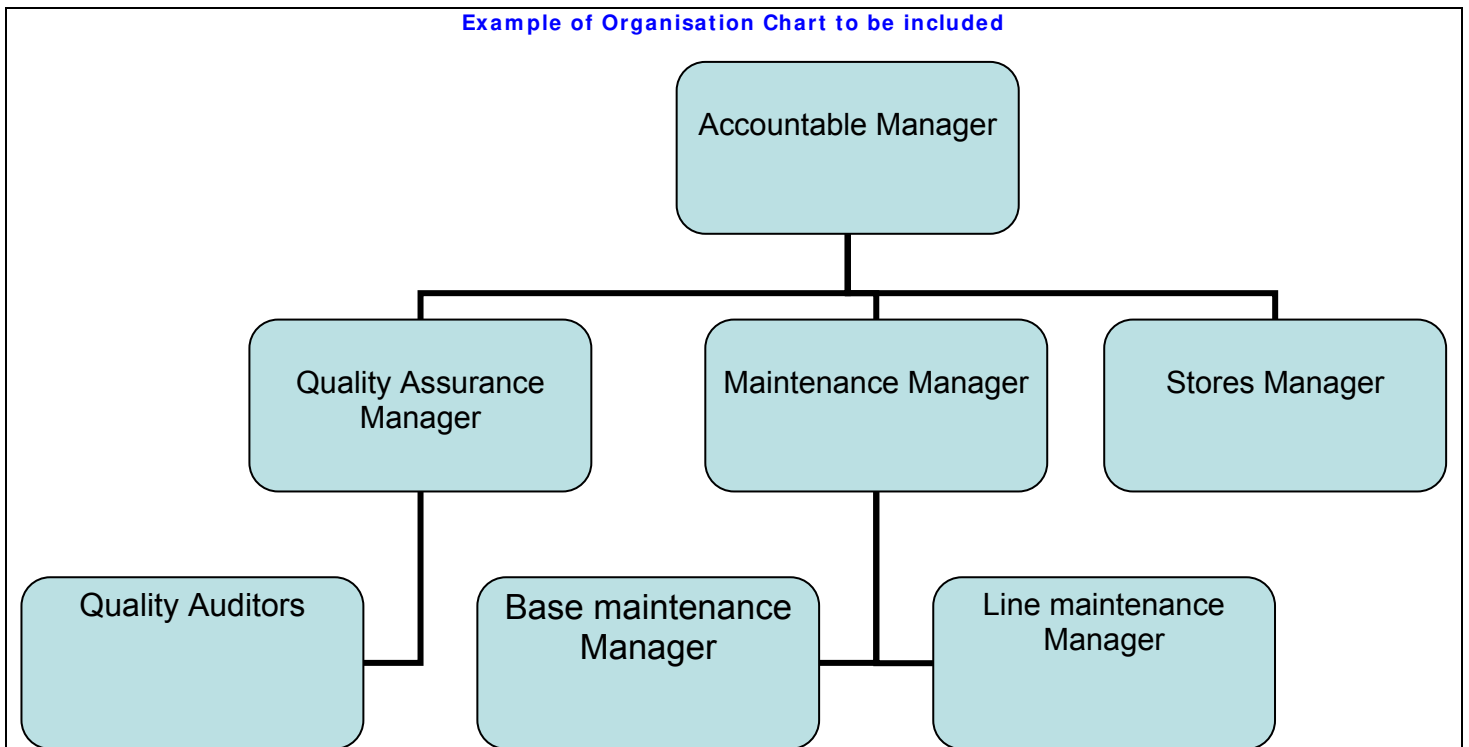
- He /she is responsible for ensuring that the organisation's procedures and standards are complied with when carrying out maintenance.

*The duties and responsibilities of the responsible NDT staff qualified in accordance with level 3 may be added.*

*Other responsibilities and duties regarding PART 145 are to be defined, dependent on the organisational structure of the particular organisation*

### 1.5 Management Organisation Chart

*Part 145.A30 (b) (c) / AMC 145.A.30 (b) 2 - Part 145.A.70 (a) 5*



*The organisation chart should show the associated chains of responsibility of the senior persons specified in Chapter 1.3. The Form 4 holders should be identified in the chart.*

*The names of the management personnel may be included in the boxes of the organisation chart but this is optional.*

*Quality Assurance personnel must be shown to be independent from Maintenance Managers.*





## 1.6 List of certifying staff and B1 and B2 support staff

Part 145.A.30 (g) (h) - Part 145.A.35 (j) / AMC 145.A.35 (j) - Part 145.A.70 (a) 6 / GM 145.A.70 (a) 3

- 1.6.1 This paragraph shall detail the scope of the national licence by comparison to EASA C, B1, B2 and A categories certifying staff.
- 1.6.2 Base certifying staff (CRS)
- 1.6.3 Base maintenance category B1 & B2 qualified support staff
- 1.6.4 Line maintenance certifying staff\* (Mechanical / Avionic)
  - Category B1 Technicians
  - Category B2 Technicians
  - Category A Mechanics
- 1.6.5 Engine shop certifying staff (EASA FORM 1)
- 1.6.6 Component certifying staff (EASA FORM 1)
- 1.6.7 Line and base maintenance certifying staff authorised under the protect rights.
  
- The management of the list(s) should be detailed in this paragraph.

*It is possible to cross-refer from this paragraph 1.6 to another record (including a computer record) where a list of the approval holders is kept. In this case an explanation of where the list is maintained and how it is updated should be included in the MOE thereby meeting the intent of the EASA requirement*

- *This list must include at least the following main information as per AMC 145.A.35 (j) :*
  - Name/forename
  - Function
  - Scope/limitation of the authorisation
  - Date of the first issue of the authorisation
  - Date of expiry if required
  - Authorisation identification number
- *This list, incorporated in an appendix or separate from the basic MOE, is an integral part of the MOE. This means that it should be approved (directly by the authority or by the organisation. through a procedure which has been previously approved by the competent authority).*
- *The Certifying staff assessment check list shall be attached to the list of certifying staff for approval submission.*

**\* Note: Certifying staff of any line maintenance station located in EU Member States must be qualified in accordance with Part 66.**



## 1.7 Manpower resources

Part 145.A30 (d) / AMC 145.A.30 (d) - Part 145.A.70 (a)

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

1.7.1 Base maintenance / Component maintenance

- Maintenance—aircraft / work shops / stores
- Technical services

1.7.2 Line maintenance

- Station resources
- En-Route arrangements

1.7.3 Quality department

- Quality assurance staff (including quality audit staff)
- Quality control staff
- Etc.

1.7.4 Technical support staff

- Engineering
- Administration
- Planning
- Librarian
- Etc.

1.7.5 Subcontracted services

- Full-time
- On-demand

1.7.6 Specialised activities

*The organisation must be able to demonstrate that they have adequate resources to justify the grant of approval as defined in paragraphs 1.8 (facilities to be approved) and 1.9 (scope of work). The system used must be presented in sufficient detail to explain the support at each site and for each function as required by Part 145.A.30 (d).*

*The organisation should not declare a percentage of staff used under this approval but the number of staff needed to comply with Part 145 requirements.*



## 1.8 Facilities

*Part 145.A.25 (a) (b) (c) 1, 2, 3,4,5,6, (d)/ AMC 145.A.25 (a) 1,2,3,4 (b) (d) 1,2,3 - Part 145.A.70 (a) 8,15 - Part 145.A.75 (d)*

This section should describe each of the facilities, in some detail, at which the organisation intends to carry out maintenance. This should provide a clear picture of what EASA is being asked to approve. All sites should be covered; however, a different emphasis can be placed on sites dependent on the level of work undertaken.

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

- 1.8.1 Base maintenance facilities
  - Hangar accommodation
  - Specialised workshops
  - Environmental provisions
  - Office accommodation for: (planning, technical records, Quality, technical reference area, Storage, etc)
  
- 1.8.2 Line maintenance facilities (at each location) as appropriate.
  
- 1.8.3 Component maintenance facilities.
  
- 1.8.4 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.*

*The "hangar visit plan" should be made available to commercial air transport operators supported by the organisation where the size of the accommodation gives rise to questions of adequacy of space. The hangar visit plan should also include non commercial air transport or other activities.*

*In accordance with AMC 145.A.25 (a) 3, 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.*



## 1.9 Scope of Work

Part 145.A.20 / AMC 145.A.20 - Part 145.A.42 (c) - Part 145.A70 (a) 9 - Part 145.A.75 (a) (b) (c) (d) (e) - Part 145.A.80 / AMC 145.A.80

This paragraph must show the range of work carried out at each approved site within the scope of the approval (EASA Form 3 - Schedule of Approval). This section should also relate to paragraphs 1.8 & 5.3 in such a way that it can be clearly seen which specific tasks are performed at which locations.

### 1.9.1 Aircraft Maintenance

#### Example:

Rating	TC HOLDER	AIRCRAFT MODEL	LIMITATION	MAINTENANCE Level **	Base	Line
A1	AIRBUS	A300 B2-202 A300 B4-102	Airbus A300 basic model (GE CF6)	Up to and including C* checks	X	X
A1	AIRBUS	A300 C4-203	Airbus A300 basic model (GE CF6)	Daily / weekly / defect rectification		X
A1	AIRBUS	A300 B2-320	Airbus A300 basic model (PW JT9D)	Daily/Weekly/defect rectifications		X
A1	The BOEING COMPANY	Boeing 767-200	BOEING 767-200 (PW 4000)	Up to C checks* excluding C4C, S4C and multiples	X	X
A2	PILATUS AIRCRAFT	PC- 12 PC-12/45 PC-12/47E	Pilatus PC 12 (PW PT6)	Up to and including weekly checks		X
A2	LAVIA ARGENTINA S.A. (LAVIASA)	-	Piper PA-25 (Lycoming)	Up to and including 100H/Annual checks*	X	
A3	EUROCOPTER	AS355 E AS355 F1 AS355 F2	Eurocopter AS 355 (RR Corp 250)	Defect rectification, Daily		X
A4		NIL				

Should be mentioned in this table for each approved site:

- in columns TC holder and limitation: the information from the column 1 and 3 of the table in Appendix I to AMC to Part-66 respectively, as specified in **ED DECISION 2009/016/R** and its successive issues, except that the word "Series" should be deleted. The limitation must include the engine type.
- in column Aircraft Model: the data from column 2 "Aeroplane Model" or "Helicopter Model" from the same Appendix I
- in column Maintenance level: the scope of maintenance activity agreed by the Competent Authority.
- in case of group rating, each aircraft composing the group should be listed.

\*: The limitation relative to the maintenance checks/tasks should be addressed as referenced in TC Holder data (i.e. 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 AMO shall contact the competent authority.

**1.9.2 Engine maintenance****Example:**

Rating	ENGINE/ APU MODEL	Limitation	Maintenance level
B1	TFE 731-20	TFE 731- 20AR	Modules turbine exchange
B1	GE CF6 80 E1	GE CF6-80E1A1 GE CF6-80E1A2	All Modules repair
B1	PWC 545	PWC 545A PWC 545C	Repairs IAW CMM Hot Section inspection
B2	Continental IO-360	IO-360-A IO-360-AES	O/H
B3	Honeywell GTCP 85	GTCP 85-H	Minor repair i.a.w CMM 49- XX-XX

**For engines only**, should be mentioned in this table for each approved site:

- in column Engine / APU Model: the engine type as listed in the engine TCDS,
- in the column Limitation: the engine variant as defined in the engine TCDS,
- in the column Maintenance level: the scope of work agreed by the Competent Authority, reference to the relevant maintenance data should be made;
- when the maintenance performed under B1 or B3 rating is limited to boroscoping inspections, the MOE should specify the engine/APU types associated to the boroscoping technique limitation,
- for Piston engines, the column Engine Model and Limitation should contain the data: Continental and Continental IO-360 series respectively,
- as some engines may be installed also by STC, should be added only the engine agreed for installation as per the list of approved STC shown in the list of the EASA web site (Certification).

**For APU only**, should be mentioned in the table:

- in column Engine / APU Model: the APU type
- in the column Limitation: the APU variant as defined by the OEM,
- in the column Maintenance level: the scope of work agreed by the Competent Authority, reference to the relevant maintenance data should 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 should be included. The reference of the relevant CMM should also be added.

**Example:**

Rating	ATA	P/ N	Designation	Reference of the CMM	Level of maintenance	Work Shop
C1	21					
C2	22					
C3	34					
C4	52					
C5						
C6						
C7						
C8						
C9						
C10						
C11						
C12						
C13	31					
C13	42					
C13	46					
C14						
C15						
C16						
C17						
C18						
C19						
C20						
C21	41					
C22	84					

*Should be mentioned for each approved site and workshop:*

- *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 2200 reference defined in AMC 145.A.20,*
- *in the column P/N and Designation: the detailed reference number and designation of the component as per CMM respectively,*
- *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 should be mentioned in this list. In this case the paragraph 1.9 should only address the rating, the ATA and the Designation and should refer to the capability list reference (see example bellow).

Rating	ATA	Designation	P/ N
C1			Components in accordance with the capability list reference XXXX
C2			
C3			
C4			



### 1.9.4 Specialised services maintenance

#### Example:

Rating	Limitation	Detail of limitation
D1	Liquid Penetrant Inspection (PT)	
	Magnetic Particle Inspection (MT)	
	Eddy Current Inspection (ET)	
	Ultrasonic Inspection (UT)	
	Radiographic Inspection (RT)	Example : Except Gamma Ray inspection
	Thermography Inspection (IRT)	
	Shearography Inspection (ST)	

*Should be mentioned for each approved site and workshop:*

- *in column Rating: D1,*
- *in column Limitation: should be quoted the NDT method (strikethrough as necessary)*
- *in column Detail of limitation: the detailed method of test when applicable or the relevant exception.*

*Where an Organisation does not hold a D1 rating but carries out NDT tasks in the “course of maintenance” under A, B and C rating, the scope of the NDT must be however detailed in this paragraph.*

*Each specialised maintenance tasks such as but not limited to painting, welding shall be detailed in this chapter.*



## 1.10 Notification Procedure to the Authority Regarding Changes to the Organisation's Activities / Approval / Location / Personnel

Part 145.A.15 (a) / AMC 145.A.15 - Part 145.A30 (a) (b) - Part 145.A.70 (a) 10 / GM 145.A.70 (a) 9 - Part 145.A.85 / AMC 145.A.85

EASA approval is based on the management, organisation, resources, facilities and scope of work described in this Part 1 of the Exposition. Any significant change therefore affects the conditions under which the approval was granted and has been allowed to continue. According to § 145.A.85 this part of the Exposition must show how the company would notify the competent authority of the following:

- Change of the name of the organisation
- Changes of approved maintenance sites
- Addition or cancellation of approved maintenance sites
- Change of Accountable Manager
- Change of nominated personnel
- Any changes in company activities that could affect the scope of approval as per EASA Form 3 or MOE chapter 1.9 and related to:
  - Facilities
  - Equipment
  - Tools
  - Material
  - Procedures
  - Work scope
  - Certifying staff

*In accordance with PART 145.A.85 and AMC 145.A.15, the procedure must specify when and how (notification and submission process) the organisation will advise EASA of any reportable changes to the organisation.*





## 1.11 Exposition Amendment Procedures (including, delegated procedures)

Part 145.A.70 (a) 11, (b) (c) / GM 145.A.70 (a) 6, 7 - Part 145.A.85

The Quality Manager is responsible for reviewing the MOE on a regular basis and amending if necessary, this includes the associated procedure manuals, and the submission of proposed amendments to the NAA responsible for oversight or EASA as applicable.

- Person responsible for amending the Exposition.
- Definition of minor & major amendments to the Exposition and approval process.
- Definition of criteria for new issue or amendment/revision.
- The record of the Part-145 approval certificate and approval of the MOE and subsequent amendment should be described:
  - Approval letter from the competent authority as applicable
  - PART 145 approval certificate and/or appendix amendments following evolution of the scope of activity and/or evolution of the locations and/or a new issue of the MOE

*This procedure must address the Exposition amendment procedure which includes but is not limited to the associated procedures, the list of certifying staff and the capability list.*

*NOTE 1: For initial approval and change of approval applications, a Statement signed by the Organisation Quality Assurance Manager shall always be provided (before the audit takes place) confirming that processes, areas and personnel subject to the application have been reviewed and audited showing satisfactory compliance with all applicable Part 145 requirements. The relevant audit report shall be provided to the Team Leader (TL) on request.*

*NOTE 2: In case of minor amendment the Quality Manager may be delegated for indirect approval provided the appropriate procedure within this paragraph of the MOE is approved by EASA. Such a delegation is to be based upon the ability of the Quality System to deal adequately with the Part 145 requirements. This ability cannot be therefore demonstrated at the time of the initial approval. Therefore an indirect approval procedure cannot be detailed in the MOE before the first 2 year period has been completed. In any case the overseeing authority must continue to receive a copy and acknowledge receipt of all such minor changes when "indirectly" approved.*



## PART 2 – MAINTENANCE PROCEDURES

### 2.1 Supplier Evaluation and Subcontract Control Procedure

Part 145.A.42 (a) / AMC 145.A.42 (a) - Part 145.A.70 (a) 12, 14, 16 - Part 145.A.75 (b) / AMC 145.A.75 (b)

This paragraph should refer to both PART 145.A.42 and AMC 145.A.42 (a) which concern the constant compliance of materials used by the organisation (equipment, consumables, standards, materials, ingredients) and to 145.A.75 (b) regarding the procedures for the control of sub-contractors not approved under Part 145.

- Suppliers' company policy
  - Sources of supplies (e.g. constructor, original manufacturer (OEM), distributor approved by the manufacturer, retailer, airline, ...)
  - Types of (e.g. equipment, consumables, standards, materials, ingredients, ...)
  
- Subcontractors company policy:
  - Sources of services (e.g. Part 145 approved maintenance organisation, non Part 145 approved organisation, ...)
  - Types of services (e.g. specialised work, line maintenance, component maintenance, ...)
  
- Monitoring of suppliers and subcontractors:
  - Selection processes for each type of suppliers and subcontractors;
  - Internal acceptance processes for each type of suppliers and authorisation of subcontractors
  - Monitoring of the internal authorisations (e.g. scope of authorisation, validity, ...)
  - Withdraw of the internal authorisation.
  
- Monitoring of the list of suppliers and subcontractors versus internal authorisation:
  - Incoming inspection results, audit results, possible internal limitation...
  - Updating of the list
  - Internal distribution of the list – access / authorisation of computerised list
  - Assessment of the service provided
  
- Monitoring of the related suppliers and subcontractors files.
  
- Management of the purchase orders according to the approved suppliers/ subcontractors.
  
- Records of suppliers and subcontractors information:
  - Duration / location
  - Type of documents (Certificates, audit reports, list of suppliers, incoming inspection results, ...)



## 2.2 Acceptance / Inspection of Aircraft Components and Materials from Outside Customers

Part 145.A.42 (a) 1, 4, 5 (c) / AMC 145.A.42 (a) (b) (c) (d) (e) - Part 145.A.55 (a) - Part 145.A.70 (a) 12, 14, 16

This paragraph should refer to PART 145.A.42 (a) 1, 4, 5, and AMC 145.A.42 (a) (b) (c) (d) (e) that cover the compliance of materials in general (equipment, components, standard parts, materials, ingredients) received from suppliers / subcontractors / internal sources.

- Component / Material acceptance procedure:
  - Sources
  - Conformity with company requirements (e.g. type of release requested, ...)
  - Records
  
- Incoming inspection For Component / Material:
  - Required documentation
  - Compliance with order / condition
  - "Quarantine" procedure
  - Modification Standard and AD compliance
  - Identification of storage limitation/ life limits
  
- Acceptance and incoming inspection of components from internal sources (e.g. transfer between stores, from the work shops):
  - Conformity with company requirements,
  - Records
  - Required documentation
  - Compliance with order, condition,
  - "Quarantine" procedure
  - Identification of storage limitation/ life limits
  
- Acceptance and incoming inspection of internal fabricated parts in accordance with 145.A.42 (c).
  
- Components removed serviceable from aircraft.
  
- Components received from customers for Repair and/or Overhaul etc
  
- Procedure of treatment of a suspected unapproved part « bogus part »
  - Identification
  - Record
  - notification to the Authority
  - Form used
  - notification address to EASA
  - etc....



## 2.3 Storage, Tagging and Release of Aircraft Components and Materials to Aircraft Maintenance

Part 145.A.25 (d), AMC 145.A.25 (d) 1, 2, 3 - Part 145.A.40 (a) - AMC 145.A.42 (b) - Part 145.A.70 (a) 12

- Procedures for maintaining satisfactory storage conditions (including segregation) of:
  - Routable
  - Perishables, raw material
  - Flammable fluids
  - Engines
  - Bulky assemblies
  - Record of position in the store (s)
  - Etc
  
- System and procedure to control shelf life / Life limit and modification standard.
  
- Special storage requirements (condition and limitation) e.g.: ESD sensitive devices, rubber.
  
- Tagging / Labelling system and storage areas
  - Serviceable parts / material
  - Unserviceable
  - Robbery
  - Unsalvageable components (see Part145.A.42(d))
  - Quarantine
  - Batch number
  - Scrap (etc.)
  
- Issue of components to the maintenance process
  
- Free-issue dispensing of standard parts (control, identification, segregation)

*The storage condition and the storage limitation must be based upon manufacturer specifications.*



## 2.4 Acceptance of Tools and Equipment

Part 145.A.40 (a) 1, 2, 3 (b) / AMC 145.A.40 (a) (b) - Part 145.A.70 (a) 12

This paragraph should refer to PART 145.A.40 (a) 1, 2, 3 and AMC 145.A.40 (a) (b). It must describe the procedures for the acceptance of new, maintained, modified, calibrated tools/ equipment received and also the lent/ hired tooling. It could also specify (as for paragraph 2.1) the assessment processes of tooling suppliers and control of subcontractors carrying out maintenance services on 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
- Procedure for use of non-manufacturer recommended (i.e. alternate) tools and equipment.
- Monitoring of tools suppliers and subcontractors
  - Selection processes for each type of suppliers
  - internal authorisation processes for each type of suppliers and subcontractors
  - Monitoring of the internal authorisations (e.g. scope of authorisation, validity, ... )
  - Withdrawal of the internal authorisation

*The procedure for alternate tools and equipment should address the procedure followed by the organisation in terms of approved data used, manufacturing control, validation, acceptance, records of maintenance data.*

## 2.5 Calibration of Tools and Equipment

Part 145.A.40 (a) 1, 2, 3 (b) / AMC 145.A.40 (a) (b) 1, 2 - Part 145.A.70 (a) 12

This paragraph should refer to PART 145.A.40 (a) 1, 2, 3 (b) and AMC 145.A.40 (a) (b) 1, 2. It must 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



## 2.6 Use of Tooling and Equipment by Staff (including alternate tools)

This paragraph should refer to PART 145.A.40 (a) 1, 2, 3 (b) and AMC 145.A.40 (a) (b) 1, 2. It must describe all management procedures for tooling, distribution and return of the tooling after use:

- Distribution of tools (e.g. record of user and location).
- 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 alternate tools:
  - Demonstration of equivalence between design/manufacturing data of alternate tools and the data/features of the tools recommended in the maintenance data of the manufacturers
  - In-house identification rule of alternate tools (PN, SN)
  - Alternate tools validation process
  - Register of alternate tools /tagging/relation between the references of origin tools and alternate tools.
  - Treatment of possible changes of maintenance data according to the new references of alternate tooling (modifications limited to the references of the tooling to be used and/or adaptation of maintenance data regarding alternate tooling)
  - Use/storage/maintenance manuals according to the need
  - In-house approval of each alternate tooling before servicing
  - Storage of the records of alternate tooling.

## 2.7 Cleanliness Standards of Maintenance Facilities

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



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

*Part 145.A.45 (a) (b) (c) (d) (e) (f) (g) / AMC 145.A.45 (b) 1, 2, 3, 4, 5, 6 (e) - AMC 145.A.45 © 1, 2 (d), (f) 1, 2 (g) 1, 2, 3 - Part 145.A.70 (a) 12*

This paragraph should refer to PART 145.A.45(a), (b), (c), (d), (e) (f) (g) and AMC 145.A.45(b) 1, 2, 3, 4, 5, 6, (c) 1, 2, (d) (e) (f) 1, 2, (g) 1, 2, 3. This paragraph must describe the management procedure of the technical documentation issued by the authority responsible for continuing airworthiness of the aircraft and components. It should also cover the issue/control of CN, AD, requirements, procedures, operational orders, leaflets by the type certificate holders, STC holders, Part 21 organisations (AMM, CMM, SRM, IPC, WDM, NDT manual, SB, SIL...) and by the Agency.

- Control of information
  - Technical library
  - Subscriptions control
  - Information held / need regarding the scope of work
  - Issue / amendment control
- Technical information amendment procedures
  - Manuals
  - Service Information (AD - SB – SIL, etc.)
  - Distribution: access to the staff
- Company Technical Procedures / Instructions
  - Issue / Amendments control
  - Distribution: access to the staff
- Maintenance documentation
  - Preparation from approved sources
  - Work cards (AMC 145.A.45 (e))
  - Amendment control
  - Transfer of airworthiness data
  - Review and identification of amendment status of maintenance instructions
  - Distribution: access to the staff
- Verification and validation of new procedures where practicable
- Incorporation of best practice and human factors principles
- Control of customer supplied maintenance data
- Incorporation of FTS concept on maintenance documentation (Job Instruction Cards etc.)
- Incorporation of CDCCL concept. ED Decision n° 2009/007R
  - compliance with CDCCL instructions
  - traceability of CDCCL completion
- Awareness of Technical Publications, Instructions and Service Information by the staff



## 2.9 Repair Procedure

Part 145.A.45 (a) (b) (c) (d) (e) (f) (g) / AMC 145.a.45 (b) (c) (d) (f) (g) - Part 145.A.70 (a) 12

This paragraph should refer to the repairs to be carried out not described in the manufacturers' documentation. According to PART 145.A.45 (d), the PART 145 organisation may change the maintenance instructions only in accordance with the procedure described in the MOE and provided that the changes do not affect the design of the repairs.

- Company policy
  - Sources of repair approval (e.g.: DOA, SRM, Authority of A/C registration,)
  - Internal repairs
  - External repairs
  - Work order
  - Maintenance instruction (job cards,...)
- Control of the scope of work (limitations and conditions)
- Control system for fabrication of parts, processing and inspection in accordance with Part.145.A.42(c)

## 2.10 Aircraft Maintenance Programme Compliance

Part 145.A.45 (a) (b) (c) (d) (e) (f) (g) / AMC 145.A.45 (b) (c) (d) (f) (g) - Part 145.A.70 (a) 12 (b)

This paragraph should refer to the aircraft, engines and equipment maintenance programmes (scheduled tasks, inspections, adjustment, tests, replacement of equipment/limited life parts...). The maintenance program must always remain the responsibility of the Operator.

- Maintenance programme variations
- Corrosion control programme reporting
- SSI reporting
- Reliability reporting
- Maintenance Preparation:
  - Taking into account Aircraft or Equipment associated maintenance tasks/ work order
  - Checking of the scope of work according to the Work order
  - Control of the maintenance documents (list + MM / job cards / series)
  - Preparation (facilities, staff, material means, tooling...)

*It is necessary to make a difference between the activities of management / developing of the maintenance program on behalf of customers/ air carriers and the one carried out as part of PART 145 agreement. Only the activities above which concern PART 145 organisation works have to be presented in the MOE*





## 2.11 Airworthiness Directives Procedure

Part 145.A.45 (a) (b) (c) (d) (e) (f) (g) / AMC 145.A.45 (b) 1 - Part 145.A.70 (a) 12

- Company policy
  - Studying ADs according to the scope of work of the organisation
  - Selection ADs according to the scope of work of the organisation
  - Recording ADs according to the scope of work of the organisation
  - Internal or external ADs' embodiment (linked to the scope of work)
- Checking and enforcement of ADs on the equipment managed by the organisation, including the spare parts (stock).
- Accomplishment of Aircraft or Equipment 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

*The follow up of the airworthiness directives is the responsibility of the operator who must request their enforcement on the order sent to the maintenance organisation.*

*It is necessary to make a difference between the activities of management / launching of ADs on behalf of customers/ air carriers and the one carried out as part of PART-145 approval. Only the activities above which concern PART 145 organisation tasks have to be described in the MOE.*

## 2.12 Optional Modification Procedure

Part 145.A.45 (a) (b) (c) (d) (e) (f) (g) / AMC 145.A.45 (b) (c) (d) (f) (g) - Part 145.A.70 (a) 12 (b)

*This paragraph should refer to the modifications to be embodied on the aircraft/equipment/engines described in the manufacturers' documents and the modifications not defined in manufacturers' documents. According to PART 145.A.45 (d), the PART 145 organisation can only change the maintenance instructions in accordance with a procedure described in the MOE.*

- Company policy
  - Sources of modification approval (DOA, authority of A/C registration)
  - Internal modification
  - External modification including embodiment of STCs'
- Control of the scope of work (limitations and conditions)
- Control system for fabrication of parts processing and inspection in accordance with Part.145.A.42(c) already addressed in § 2.9
- Control of the fabrication, the inspection assembly and the test of fabricated parts.

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

*It is necessary to make a difference between the activities of management / developing/launching of Optional modification on behalf of customers/ air carriers and the one carried out as part of PART 145 agreement. Only the activities above which concern PART 145 organisation works have to be presented in the MOE*



## 2.13 Maintenance Documentation in use and its Completion

Part 145.A.45 (e) / AMC 145.A.45 (f) - Part 145.A.55 (a) - Part 145.A.70 (a) 12

This paragraph should refer to the creation of a standard work file and how to complete the work documents/ work cards making up these files. Specific instructions from manufacturer maintenance data related to CDCCL shall be considered.

- Assembly of work packages for issue to maintenance activity
- 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, ...)
- Worksheets for non-routine task
- Worksheet / work card completion and maintenance sign-off
- Assembly of completed work package for certification
- Recording of test results and dimensions (AMC 145.A.50 (d))
- Control and use of customer supplied work card/worksheets

## 2.14 Technical Records Control

Part 145.A.55 (a) (c) 1, 2, 3 / AMC 145.A.55 (c) / GM 145.A.55 (a) 1, 2, 3 - Part 145.A.70 (a) 12 (b)

- System for control, storage conditions (fire extinguisher system, fire detection, ...) and retrieval of records (paper or computer based)
- Control of access to records (paper and / or computer based records)
- Record-keeping systems (W/P, TLB..)
- Lost or destroyed records (reconstruction and EASA acceptance)
- Provision of records to operator (copy or original W/P, TLB, CRS)
- Retention of records
  - Periods
  - Methods and security

## 2.15 Rectification of Defects Arising During Base Maintenance

- Base maintenance procedure:
  - Records of base maintenance defects
  - Sign-off of base maintenance defects
- Analysis of defects and rectification
- Notification process (when necessary) to the customer, manufacturer and authority
- Report to the operator/ approval of the customer to launch the rectification according to the contract

*Incorporation of standard defect rectification in work files, record, control, release certificate and information to the customers are to be dealt with in paragraphs 2.13, 2.14, 2.16, 2.17*



## 2.16 Release to Service Procedure

Part 145.A.30 (g) (h) (i) (j) / AMC 145.A.30 (e) 3, (g) (h) (j) - Part 145.A.35 (a) to (m) / AMC 145.A.35 (a) (b) (e) (f) (g) - Part 145.A.50 (a) (b) (d) (e) (f) / AMC 145.A.50 (a) 1, 2 (b) 1, 2, 3, 4, 5 / AMC 145.A.50 (d) (e) 1, 2, 3 (f) 1, 2 - Part 145.A.55 (a) (b) (c) / AMC 145.A.55 (c) - Part 145.A.70 (a) 12 - Part 145.A.75 (e)

- Company procedures (CRS statement)
- Issue of CRS after Base Maintenance
- Issue of CRS after Line Maintenance
- Issue of CRS after Defect Rectification (Base / Line)
- Issue of a CRS with incomplete work
- Sign off after maintenance task completion (see AMC 145.A.65 (b)(3))
- Cross-reference to work packs
- Issue of EASA Form 1
- Release of components removed serviceable from aircraft (AMC 145.A.50 (a))
  - issuance of an EASA Form 1 for components removed serviceable from EU registered A/C
  - swap/change over serviceable components between EU registered A/C
  - issuance of an EASA Form 1 for components removed serviceable from a non EU registered A/C
  - swap/change over serviceable components between non EU registered A/C
- Issue of a one off certification authorisation CRS
- Certification authorisation (identity, qualified staff)

*The following cases could be addressed in this paragraph:*

- *The impossibility to sign a release certificate that could hazard flight safety (AD owed and not enforced, work carried out not in accordance with the approved data, without approved data, discrepancies that may have consequences on the airworthiness of the aircraft/ equipment/ engine).*
- *The temporary fitting an aircraft component without appropriate release certificate in case of AOG in stopover and associated conditions (30 hours of flight, agreement of the customer, acceptable certificate, checking the status of the equipment, technical log record, corrective action when the aircraft returns to its maintenance base...).*

## 2.17 Records for the Operator

Part 145.A.55 (b) - Part 145.A.70 (a) 12

- Contracted record keeping for operators
- Arrangements for processing and retention of Operator's maintenance records



## 2.18 Reporting of Defects to the Competent Authority/ Operator/ Manufacturer

AMC 145.A.50 (a) - Part 145.A.60 (a) (b) (c) (d) (e) / AMC 145.A.60 (b) / GM 145.A.60 (a) (c) - Part 145.A.70 (a) 12  
This paragraph must describe the reporting procedure to EASA, the state of registry and the organisation responsible for the design of the aircraft or component any condition of the aircraft or component identified by the organisation that has resulted or may result in unsafe condition that hazards seriously the flight safety. These reporting procedures are part of the internal occurrence reporting system as detailed in § 145.A60 (a) (b)(c)(d), AMC 145.A60(b) and AMC 20-8 and described in MOE § 2.25.

- Methods for reporting to:
  - EASA and allocated NAAs (Form 44)
  - Manufacturer
  - Operator
- Reportable defects
- Technical Occurrence report Form 44 and completion instructions
- Investigation procedure and follow-up system
- Reporting timescale
- Reports must contain pertinent and evaluation results (where known)
- Persons responsible for reporting
- Defects reported by subcontractors
- Permitted reporting periods and retention of data

## 2.19 Return of Defective Aircraft Components to Store

Part 145.A.40 - Part 145.A.42 (d) / AMC 145.A.42 (d) 1, 2 - Part 145.A.70 (a) 12

This paragraph should refer to the process of parts returned by maintenance teams to the store.

- Labelling and identification of "defective" components (required information)
- Handling and movement of components (link between involved departments)
- Storage of "defective" components
- Components "on hold" (pending determination of serviceability status – e.g.: Swap component for trouble shooting)

*Defective component means component removed from the A/C for any reason*

## 2.20 Defective Components to Outside Contractors

Part 145.A.40 - Part 145.A.42 - Part 145.A.70 (a) 12, 14, 16

This paragraph should refer to the process of sending components to outside contractors for repair or modification.

- Dispatch of components for repair / overhaul / calibration
- Identification of required work
- 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

Part 145.A.45 / AMC 145.A.45 (g) 3 - AMC 145.A.50 (b) 5 - Part 145.A.55 (c) 2 / AMC 145.a.55 (a) 4, 6, (c) 2

This paragraph should refer to the computer systems used to manage and/or record information regarding the maintenance tasks carried out

- Information retrieval
- Back-up systems (frequency, means, delay) and second site storage (frequency, means, delay)
- Security and safeguards to unauthorised access

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

Part 145.A.30 (d) / AMC 145.a.30 (d) 1, 2, 3, 4, 5, 7, 8 - Part 145.A.70 (a) 12 (b)

- 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 shift
- Notification to the Accountable Manager of deviations exceeding 25% between the work load and the man hour availability

## 2.23 Control of Critical tasks

Part 145.A.65 (b) 3 / AMC 145.A.65 (b) 3 - Part 145.A.70 (a) 12 (b)

This paragraph should refer to AMC 145.A.65 (b) 3 that requires specific procedures in the MOE to minimise the risk of multiple errors and capture errors on critical systems. It should also cover the prevention, where possible, of simultaneous maintenance on similar systems on the same aircraft.

- Critical task procedures and control (line & base maintenance activity)
- Critical task list
- Duplicate inspection procedures

## 2.24 Reference to Specific Maintenance Procedures

Part 145.A.70 (a) 12

- Work away from base or work shop including occasional Line maintenance as per 145.A.75
- Engine run up
- Aircraft pressure run
- Aircraft towing
- Aircraft taxiing
- Technical wash
- Control/ supervision of de-icing systems
- Handling and control of waste materials
- Scrapping of parts



## 2.25 Procedures to detect and rectify Maintenance Errors

Part 145.A.60 (a) (b) (c) (d) / AMC 145.A.60 (b) - Part 145.A.65 (b) 3 /AMC145.A.65 (b) 3 - Part 145.A.70 (a) 12

- Aims and objectives of error management system
  - The encouragement of reporting
  - A code of practice
  - No reprisal policy
- Description of process to report occurrences (occurrence reporting system)
- Description of process to investigate occurrences
- Description of process to record occurrences
- The analysis of occurrence data
- Management actions in response to occurrence findings
- Feedback to staff
- Sharing information from investigations

## 2.26 Shift / Task Handover Procedures

Part 145.A.47 (c) / AMC 145.A.47 (c) - Part 145.A.70 (a) 12

- Aims and objectives of the shift handover
- Training of personnel in shift/task handover processes
- Recording of shift/task handover
- Description of 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 to the Type Certificate Holder

Part 145.A.45 (c) / AMC 145.A.45 @ 1, 2 - Part 145.A.70 (a) 12

- Definitions of maintenance data ambiguities
- Method of internal reporting of maintenance data ambiguities
- Method of external reporting of maintenance data ambiguities to the authors of that data
- Feedback to staff and implementation of TC Holder/Manufacturer corrections
- Impact of the data ambiguity on the on going maintenance task

*The authors are:*

- *Aircraft / component design organisation (AMM, SB, SRM..)*
- *The competent authority AD*
- *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 Procedures

*Part 145.A.47 (a) (b) / AMC145.A.47 (a) (b) - Part 145.A.70 (a) 12*

- Establishment of a clear work order or contract
- Procedures for establishing all necessary resources are available before commencement of work (manpower with required capabilities, tools, equipment, parts, documentation, etc.)
- Procedures for organizing maintenance personnel and providing all necessary support during maintenance
- Consideration of human performance limitations (Circadian rhythm / 24 hours body cycle...)
- Planning of critical tasks



## PART L2

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

Part 145.A.70 (a) 12, 15 - Part 145.A.75 (b), (c), (d)

This paragraph 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 of a workshop carrying out base and line maintenance.

- Component / Material acceptance - (required documentation, condition, "Quarantine" procedure)
- Components removed serviceable from aircraft (robbery)
- 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, robbery, scrap, etc)
- Release of components to the maintenance process
- Free-issue dispensing (self service) of standard parts (control, identification, segregation)
- Tools and test equipment, servicing and calibration programme / equipment register
- Identification of servicing / calibration due dates

### **L2.2 Line Maintenance Procedure related to Servicing / Fuelling / De-icing / etc**

Part 145.A.70 (a) 12, 15 - Part 145.A.75 (b), (c), (d)

This paragraph 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-fuelling)
- 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**

Part 145.A.70 (a) 12, 15 - Part 145.A.75 (b), (c), (d)

This paragraph must describe the general procedures followed by the organisation regarding the rectification of defects and repetitive defects recorded during operation of the aircraft. The procedures should also cover the follow up of defects and repetitive defects on behalf of customers/ operators and the PART 145 approval holder.

- Reportable defects
- Rules for deferring (periods - review - permitted personnel - conformity with MEL /CDL provisions)
- Awareness of deferred defects carried by aircraft – (monitoring of repetitive defects - Communication with main base)
- Analysis of tech log (repetitive defects – crew complaints - Analysis and transfer of cabin log items as required)
- Co-ordination with the operator

### **L2.4 Line Procedure for completion of Technical Log**





Part 145.A.70 (a) 12, 15 - Part 145.A.75 (b), (c), (d)

This paragraph 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 paragraphs 2.13, 2.16 of the MOE.

- Technical Log system:
  - Taking into account Operator Procedure
  - Completion of Sector Record Page
  - Distribution of copies
- Certification / Sign-off (Maintenance Statements)
- Maintenance Duplicate Inspections
- ETOPS Certification
- Retention of records
  - Periods
  - Methods and security

## L2.5 Line Procedure for pooled Parts and loan Parts

Part 145.A.70 (a) 12, 15 - Part 145.A.75 (b), (c), (d)

This paragraph must describe the additional management procedures for pooled or loaned parts specific to the line maintenance activity. It should also cover the removal of serviceable parts from aircraft for use on another aircraft. These procedures must be associated to paragraphs 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)
- Robbery system
  - Control procedures
  - Authority

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

Part 145.A.70 (a) 12, 15 - Part 145.A.75 (b), (c), (d)

This paragraph 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 paragraphs 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 Control of critical Tasks

Part 145.A.65 (b) 3 / AMC 145.A.65 (b) 3 - Part 145.A.70 (a) 12, 15

This paragraph is the equivalent of the paragraph 2.23 of the MOE for the line maintenance activity.

- Follow guidance as per AMC 145.A.65 (b)(3)



## PART 3 – QUALITY SYSTEM PROCEDURES

### 3.1 Quality audit of organisation procedures

Part 145.A.65 (a) - Part 145.A.65 (c) (1), (2) / AMC 145.A.65 (c) (1)

This paragraph must explain how the audit of internal procedures is organised and managed i.a.w to PART 145.A.65 and AMC 145.A.65:

- Definition of the Quality System:
  - Independence
  - Access to Accountable Manager
  - Composition and functions of management quality group
- Company Audit Policy including compliance audit:
  - Scheduled audits and audits to be carried out at random and to be carried out during maintenance including night shifts.
  - Audit notification;
  - Audit reports (documents used, writer, issue, points checked and deviations noted, deadline for rectification)
  - Validation/internal approval of the audit programme
- Annual Review of Maintenance Procedures
  - Principles of annual audit procedure planning
  - independence of the auditors
  - common audit procedures for several lines of product
  - specific audit procedure by line of product
  - audits during the performance of work
  - complete audits or several partial audits
  - principles when deviations are noted on a line of product
  - grouping of audits
- Audit programme
  - Adequate facilities
  - Compliance with approved procedures
  - Dates and timescales.
  - Product audits
  - Audit of Subcontractors and evaluation of suppliers.
- Quality audit reports retention
  - Duration (At least duration of 2 years) / location
  - Type of documents (notification, audit reports, check list, audit programs)

*Small organisation may choose to subcontract the audits to another organisation or an outside person with satisfactory technical knowledge and satisfactory audit experience.*



### 3.2 Quality audit of aircraft (and / or equipment)

Part 145.A.65 (c) (1), (2) / AMC 145.A.65 (c) (1)

This paragraph must describe the procedures related to the product audits (aircraft, aircraft component, engine, specialised service) according to PART 145.A.65 (c) 1 and AMC 145.A.65 (c).

- Company Audit Policy
  - A dedicated quality audit policy may be added, provided it does not conflict with the one describe in the previous paragraph. The Company audit procedure should include the quality audit of aircraft (and/or equipment)
- Audit programme
  - Product samples for each line of product (aircraft and / or components)
  - Dates and timescales
- Auditing methods
  - Sampling
  - "Trail" / "investigation" audits
- Records of Quality audit reports retention
  - Duration (At least duration of 2 years) / location
  - Type of documents (notification, audit reports, check list, audit programs, ...)

*Small organisation may choose to subcontract the audits to another organisation or an outside person with satisfactory technical knowledge and satisfactory audit experience.*

### 3.3 Quality audit corrective action procedure

Part 145.A.65 (c) (2) / AMC 145.A.65 (c) (2)

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

- Description of the quality audit report feedback system
- Corrective action and timescale
  - Corrective action planning and follow up
  - 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.
  - Procedure describing the M.O. action when the corrective action deadline has to be postponed or when the answer has not been received on time.
- Management responsibilities for corrective action and follow-up
- Quality audit and feedback records retention
  - Duration (minimum duration of 2 years) / location
  - Type of documents (answers, evidences,...)
- Review of the Quality system overall results
  - Meeting with the Accountable Manager. (including record of meeting procedure)
  - Regular meetings to check the progress of corrective actions

*The follow up of corrective actions can not be subcontracted The revision of the audit planning according to the deviations noted/corrected could be linked to paragraph 3.1*



### 3.4 Certifying staff and category B1 and B2 support staff qualification and training procedures

Part 145.A.30 ©, (e), (g), (j) (1, 3, 4, 5) - Part 145.A.35 (a) to (i) and (m) / AMC 145.A.35 (b), (e) - Appendix IV  
This paragraph should refer to PART 145.A.30, AMC 145.A.30, PART 145.A.35 and AMC145.A.35 and is limited to the certifying staff and category B1 and B2 support staff qualification:

- Experience, training and competence requirements (including annex IV requirements listed hereafter):
  - **Licence and/ or authorisation:** The applicant shall hold a valid licence or a valid certifying staff authorisation under the country's national regulations IAW ICAO annex I or a PART 66 Licence.
  - **Module 9 and 10:** The applicant should demonstrate he/she has received training on:
    - Human factor as detailed in PART 66
    - Aviation Legislation as detailed in PART 66
  - **Type training:** The applicant should have received type training for every aircraft on which he/she is authorised to release to service. The level of training depends of the authorisation category but should be at least:
    - Tasks training for Line maintenance certifying staff category A
    - At a level corresponding to Part 66 Appendix III, for Line Maintenance certifying staff category B1 & B2 and base maintenance support staff B1 & B2.
    - At a level corresponding to Part 66 Appendix III, for Base Maintenance certifying staff category C.
  - **FTS / CDCCL/ EWIS TRAINING**
  - **Maintenance experience:** The person shall demonstrate he/she has the following minimum years of maintenance experience:
    - Three years for line maintenance certifying staff category A
    - Five years for line maintenance certifying staff category B1 & B2 and base maintenance support staff B1 & B2.
    - Eight years for base maintenance certifying staff category C.
- Examination, test and assessment procedures including internal criteria and practical assessment
- Continuation training procedures including
  - Programme (MOE and associated procedures, PART 145, Human Factors, special requirements, ...)
  - Training setting up
  - Duration, intervals
- Authorizations issue, renewal or withdrawal procedures including
  - 6 months of experience during a two year period
  - Licence validity control
  - Continuation training
  - Evaluation, test
- One-off certification authorisation

**Note: Certifying staff of any line maintenance station located in EU Member States, must be qualified in accordance with Part 66.**



### 3.5 Certifying staff and B1/ B2 Support staff records

Part 145.A.35 (j), (k), (l) / AMC 145.A.35 (j) - Part 145.A.70 (a)

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

- List of certifying personnel and B1/B2 support staff (refer if need be to paragraph 1.5).
- Constitution of the records including:
  - Identity, date of birth, authorisation reference number, experience, scope of the authorisation, date of issue, validity, copy of the licence, copy of diplomas, copy of training certificate, continuation training, copy of the Part 145 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
  - Duration / location
  - Type of documents
- Format of authorisation document and authorisation codes
- Control of certifying staff records
  - Authorized persons
  - EASA personnel
  - Authorized managers

*The period of records retention should be at least 2 years after the authorisation has been withdrawn and/ or the departure of the certifying staff.*

*Delivery of a copy of their certification authorisation in either a documented or electronic format (Part 145.A.35 (k)). The scope of work has to be detailed, including limitations when applicable. For category A staff, for each type of aircraft, an exhaustive file of the authorised tasks has to be defined.*

### 3.6 Quality Audit Personnel

Part 145.A.30 (e)

This paragraph must describe how the Quality system personnel are managed.

- Nominated personnel
- Required experience, training and competence of quality audit personnel including continuation training.
- Examination, test and assessment procedures (as necessary)
- Independence of quality audit personnel when the organisation uses skilled personnel working within another department than that of Quality
- Retention of records
  - Duration / location
  - Type of documents

*Allocated man-hours (if not full-time) should be addressed.*

*The number of quality personnel should be adapted to the maintenance activity to be supervised (relation with 2.22).*



### 3.7 Qualifying Inspectors

This paragraph is dedicated to the qualification of the supervisors (or production inspectors / controllers) as defined in AMC 145.A.30 (e).

- Required experience (duration and technical), training and competence requirements (including FTS: CDCCL)
- Examination, test and assessment procedures including practical assessment
- Continuation training procedures including
  - Training Programme (MOE and associated procedures, PART 145, Human Factors, special requirements, ...)
  - Training setting up
  - Duration, intervals
- Retention of records
  - Duration / location
  - Type of documents

### 3.8 Qualifying mechanics

Part 145.A.30 (e), (g) - Part 145.A.35 (a), (m)

This paragraph should refer to the different specialities of technicians (mechanics, avionics, sheet metal workers, cabin, fuel, engines, components, NDT staff, composites, line maintenance...) of the organisation.

- Required experience (duration and technical), training and competence requirements (including FTS / CDCCL)
- Examination, test and assessment procedures including practical assessment
- Continuation training procedures including
  - Training Programme (MOE and associated procedures, PART 145, Human Factors, special requirements, ...)
  - Training Setting up
  - Duration / intervals
- Retention of records
  - Duration / location
  - Type of documents

### 3.9 Aircraft or aircraft component maintenance tasks exemption process control

This paragraph must describe the procedures of the organisation regarding exceptional authorisations related to maintenance tasks.

- System for control and processing with the competent authority which includes
  - 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.*



### ***3.10 Concession control for deviation from the organisations' procedures***

This paragraph must describe the procedures followed by the AMO in order to deviate from the approved MOE procedures.

- 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**



### 3.11 Qualification procedure for specialised activities such as non-destructive testing, welding

Part 145.A.30 (f), EN 4179

This paragraph should refer to the qualification of specialised services staff such as defined in AMC 145.A.30 (f). It should also apply to welders.

- NDT staff
  - List of non-destructive testing personnel
  - Levels of qualification and authorisation
  - Role and privileges of these staff (including responsible level 3 person who should approve the organisation's NDT procedures and written practice for training and certification of NDT personnel.)
- Experience & qualification
  - Criteria regarding experience, training and skills
  - Experience required by NDT method for each level of authorisation
- Training
  - Basic NDT training for each level of authorisation
  - Training on the NDT procedures of the organisation
- Examination
  - Procedure of skills assessment (practical assessment and/or examination related to the job card)
  - General examination on the fundamentals of the NDT methods
  - Specific examination by NDT method
  - Practical examination by level of authorisation
  - Medical examination
  - Eyesight testing
- Continuation training and testing
- Auditing of staff and system
- Authorizations issue, renewal or withdraw procedures
- Retention of NDT staff records
  - Duration / location
  - Type of documents
- Contract arrangement

*The certifying staff authorised in accordance with subcategory B1 of the PART 66 can carry out and/or control colour contrast dye Penetrant tests.*

*When an Organisation uses NDT methods defined by EN 4179 para 6.4 as “emerging NDT method”, the related requirements for personnel training, experience and examination should be established by the organisation in accordance with EN 4179 and the particular equipment manufacturers' recommendations.*





### 3.12 Control of manufacturers' and other maintenance working teams

This paragraph should refer to the role of outside teams acting in the premises of the organisation to carry out a maintenance task on a aircraft/ engine/ equipment in the scope of a task under the responsibility of the organisation.

- Source of work (manufacturer team, another Part 145 M.O. team) and authorisation of personnel
- System for control of materials, 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

### 3.13 Human factors training procedure

Part 145.A.30 (e) / AMC 145.A.30 (e) 6, 8, 9, 10 - Part 145.A.35 (d) - Part 145.A.65 (b)

This paragraph should refer to § 145.A.30 (e) and AMC 145.A.30 (e) 6, 7, 8, 9 and 10 which concern the human factors training for the organisation personnel.

- Aims and objectives
- Categories of staff to be trained
- Training methods and syllabus
  - Initial training
  - Continuation training
- Duration of training for
  - Initial training
  - Continuation training
- Validation of the training courses (syllabus and duration)
- Requirements for trainers
- Training Records
  - Duration / location
  - Type of documents

*Initial training to be provided to personnel within 6 months of joining the maintenance organisation, but temporary staff may need to be trained shortly after joining the organisation (AMC145.A.30 (e) 6).*

*Human factors continuation training should be in relation to relevant quality audit findings and other internal/external sources of information available to the organisation on human errors in maintenance (link with § 2.25) (AMC145.A.30 (e) 8).*

*Human factors continuation training should be amended according to the relevant quality audit findings and other internal/external sources of information available to the organisation on human errors in maintenance (link with § 2.25) (AMC145.A.30 (e) 8).*

*Human factors training could be adjusted to reflect the particular nature of the organisation (size, scope of work).*

*Human factors continuation training should be of an appropriate duration in each two year period.*



### 3.14 Competence assessment of personnel

Part 145.A.30 (e) / AMC 145.A.30 (e) 2

This paragraph 3.14 applies to all personnel involved in the organisation's maintenance activities and particularly the staff and the personnel working for the production support services (engineering, planning / preparation, reception supervisors, store keepers, tools administrators, purchasers, subcontractors, administrators ...).

- Personnel to be assessed in accordance with Part 145.A.30 (e)
- Assessment procedures/ Evaluation system
  - Training
  - Qualifications
  - Supervision
  - Assessors
  - Commission/ examination
- Management competence assessment
- Assessment records
  - Duration / location
  - Type of documents



## PART 4

### 4.1 Contracting Operators

This paragraph must list those operators for whom maintenance is provided, 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 Operator Procedures and Paperwork

*Part 145.A.70 (a) 13*

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.

### 4.3 Operator record completion

*Part 145.A.55 - Part 145.A.70 (a) 13*

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

### 5.1 Sample of Documents

#### Examples:

- Request to EASA for approval of an Exposition amendment
- Request to EASA for acceptance of a Capability List change
- Material tags: Serviceable, Unserviceable, Robbery and Scrap labels
- Tooling identification tag
- Maintenance Task Card (Scheduled Maintenance)
- Maintenance Task Card (Additional Defects)
- Base Maintenance CRS
- Line Maintenance CRS
- EASA Form 1
- Un-airworthy Conditions Report Form (inc. MOR)
- Quality Audit Report Form
- Quality Audit Corrective Action Report Form
- Personnel Training Record
- Certifying Staff Authorisation
- Concession Application and Approval

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

This paragraph must list the non PART 145 subcontractors under cover of the maintenance organisation quality system.

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

This paragraph must list the line station locations – linked with PART 1 item 1.8 – (airport and addresses)

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

This paragraph must provide the list of contracted organisation such as but not limited to Part 145.

The lists shown in 5.2, 5.3 and 5.4 may be kept separate from the Exposition and may be kept on a computer data base as long as an adequate cross-reference is included in the Exposition.



Foreign Part 145 approvals User guide for Maintenance Organisation Exposition	Doc # Approval Date	UG.CAO.00024-001 14/07/2010
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**RECORDS**

No record associated with this User Guide.