Course Syllabus

Revision 28.10.2008

Maintenance Organisation Approvals

Part-145

Detailed Course

Contents:

A. THE EU LEGAL FRAMEWORK – PRINCIPLES

The Community being a supranational organisation, Member States may no more:

- deviate from common rules
- impose additional requirements or
- Conclude arrangements with third countries.

Legislative powers

The Legislator, through the Basic Regulation:

- Defines the scope of powers transferred to the Community (the products, organizations and personnel that will be regulated by the Community to protect public interest)
- Adopts the essential requirements specifying the objectives to be met (the obligations and means to reach the desired level of protection)
- Distributes the executive tasks among the executive agents
- Establishes the means of judicial control when executive powers are given to Community bodies

Executive powers

Certification is carried out:

- By the Agency (when centralized action is more efficient).
- By the National Aviation Authorities (Commission oversight through the Agency).

Judicial powers

Oversight and enforcement are carried out by the national systems, under the supervision of national Courts
The interpretation of Community law is made by the Court of Justice of the European Community.

THE AGENCY:

- Drafts common rules (EASA Regulation and implementing rules).
- Adopts material for the implementation of common rules (airworthiness codes, interpretation and guidance material).
- Issues type certificates (TC, STC…), approves organisations (DOA and, outside the European territory, POA, MOA…), ensures their continued oversight.
- Oversees the application of rules by the Member States and recommends the necessary enforcement actions to the Commission
- Acts as a focal point for third countries and international organizations for the harmonisation of rules and the recognition / validation of certificates.

THE MEMBER STATES (NAAS):

- Provide expertise as appropriate for rulemaking tasks.
- Develop national administrative rules for the implementation and enforcement of common rules (administrative procedures).
- May take action on a case by case basis if so required to ensure safety or appropriate operational flexibility (safeguards).
- Approve organisations in their territory (except Dos).
- Issue certificates for individual products on their registry.
- Issue personnel licences for aircraft maintenance certifying staff (Part-66).

B. STRUCTURE OF THE EU REGULATORY SYSTEM

(j) BASIC REGULATION

- The Parliament and the Council define the Scope of Powers transferred from the Member States to the Community.
- They adopt the Essential Requirements specifying the objectives to be met.
- The Basic Regulation was adopted by the European Parliament and the Council, according to the co-decision procedure.
- It defines the scope of Community competence.
- It establishes the objectives and principles of Community action.
- It establishes the division of regulatory and executive powers between the Agency, the European Institutions and the Member States.

b) IMPLEMENTING RULES

The Commission adopts standards for implementing the essential requirements.
The Implementing Rules were adopted by the Commission, according to the comitology procedure.
They establish common standards in the fields of airworthiness, continuing airworthiness and environmental protection that:

- Fulfil the objectives and principles established in the Essential Requirements
- Are in compliance with ICAO SARPs

They define the Competent Authority for the executive functions and establish rules and procedures for its implementation

c) ACCEPTABLE MEANS OF COMPLIANCE

145.B.17 Acceptable means of compliance

The Agency shall develop acceptable means of compliance that the Member States may use to establish compliance with this Part. When the acceptable means of compliance are complied with, the related requirements of this Part shall be considered as met.

C. REGULATION (EC) NO 216/2008			
Chapter I Principles			
Article 1	**Scope**	(k) **Applicability of the Basic Regulation** to **products, parts and appliances** This Regulation shall apply to: (a) the design, production, maintenance and operation of aeronautical products, parts and appliances, as well as personnel and organisations involved in the design, production and maintenance of such products, parts and appliances (b) Personnel and organisations involved in the operation of aircraft.	
Chapter II Substantive requirements			
Article 4	**Basic principles and applicability**	2. Aircraft, including any installed product, part and appliance, which are: (a) designed or manufactured by an organisation for which the Agency or a Member State ensures safety oversight; or (b) registered in a Member State, unless their regulatory safety oversight has been delegated to a third country and they are not used by a Community operator; or (c) registered in a third country and used by an operator for which any Member State ensures oversight of operations, or used into, within or out of the Community by an operator established or residing in the Community; or (d) registered in a third country, or registered in a Member State which has delegated their regulatory safety oversight to a third country, and used by a third country operator into, within or out of the Community shall comply with this Regulation. (j) Paragraph 1 shall not apply to aircraft referred to in Annex II.	

Article 5	**Airworthiness**	1. Aircraft referred to in Article 4(1) (a), (b) and (c) shall comply with the essential requirements for airworthiness laid down in Annex I. 2. Compliance of aircraft referred to in Article 4(1)(b), and of products, parts and appliances mounted thereon shall be established in accordance with the following. (d) Organisations responsible for the maintenance of products, parts and appliances shall demonstrate their capability and means to discharge the responsibilities associated with their privileges. Unless otherwise accepted these capabilities and means shall be recognised through the issuance of an organisation approval. The privileges granted to the approved organisation and the scope of the approval shall be specified in the terms of approval. 5. The measures designed to amend non-essential elements of this Article, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 65(4). Those measures shall specify in particular: (f) conditions to issue, maintain, amend, suspend or revoke organisation approvals i.a.w. § 2(d), (e) and (g) and conditions under which such approvals need not be requested; Responsibilities of the holders of certificates.	
Article 11	**Recognition of certificates**	1. Member States shall, without further technical requirements or evaluation, recognise the certificates issued in accordance with this Regulation. When the original recognition is for a particular purpose, or purposes, any subsequent recognition shall cover only the same purpose or purpose(s). *Note: such an "automatic mutual recognition" is possible, provided that the State issuing the certificates is fully compliant with the provisions of the Basic Regulation. If that is not the case (i.e. new Member States accessing the European Union), then this article shall not apply (Refer to Regulation 1962/2006 for a practical example).*	

		2. The Commission, on its own initiative or at the request of a Member State or of the Agency, may initiate the procedure referred to in Article 65(7) to decide whether a certificate issued in accordance with this Regulation effectively complies with this Regulation and its implementing rules. In case of non-compliance or ineffective compliance, the Commission shall require the issuer of a certificate to take appropriate corrective action and safeguard measures, such as limitation or suspension of the certificate. Moreover, the provisions of paragraph 1 shall cease to apply to the certificate from the date of the notification of the Commission's decision to the Member States. 3. When the Commission has sufficient evidence that appropriate corrective action has been taken by the issuer referred to in paragraph 2 to address the case of non-compliance or ineffective compliance and that the safeguard measures are no longer necessary, it shall decide that the provisions of paragraph 1 apply again to this certificate. These provisions shall apply as from the date of the notification of this decision to the Member States.	
Article 14	**Flexibility provisions**	(k) Member States may grant exemptions in the event of unforeseen urgent operational circumstances or operational needs of a limited duration, provided the level of safety is not adversely affected thereby. Appropriate notification.	
Article 18	**Agency measures**	The Agency shall, where appropriate: (a) issue opinions addressed to the Commission; (b) issue recommendations addressed to the Commission for the application of Art. 14; (c) issue certification specifications, including airworthiness codes and acceptable means of compliance, as well as any guidance material for the application of this Regulation and its implementing rules.	
ANNEX I			
Essential requirements	**3. Organisations**	3.a. Organisation approvals must be issued when the following conditions are met:	

For airworthiness referred to in Article 5		3.a.1. the organisation must have all the means necessary for the scope of work. These means comprise, but are not limited to, the following: facilities, personnel, equipment, tools and material, documentation of tasks, responsibilities and procedures, access to relevant data and record-keeping; 3.a.2. the organisation must implement and maintain a management system to ensure compliance with these essential requirements for airworthiness, and aim for continuous improvement of this system; 3.a.3. the organisation must establish arrangements with other relevant organisations, as necessary, to ensure continuing compliance with these essential requirements for airworthiness; 3.a.4. the organisation must establish an occurrence reporting and/or handling system, which must be used by the management system under point 3.a.2 and the arrangements under point 3.a.3, in order to contribute to the aim of continuous improvement of the safety of products.	
ANNEX II	**Aircraft referred to in Article 4(4)**	Art. 4(1), (2) & (3) do not apply to aircraft falling in one or more of the categories below. (a) historic aircraft meeting the criteria below: (i) non complex aircraft whose: – initial design was established before 1.1.1955 and (l) production has been stopped before 1.1.1975 or (m) aircraft having a clear historical relevance, related to: (n) a participation in a noteworthy historical event; or – a major step in the development of aviation; or – a major role played into the armed forces of a Member State. (o) aircraft specifically designed or modified for research, experimental or scientific purposes, and likely to be produced in very limited numbers.	

		I aircraft of which at least 51% is built by an amateur, or a non profit making association of amateurs, for their own purposes and without any commercial objective. (d) Aircraft that have been in the service of military forces, unless the aircraft is of a type for which a design standard has been adopted by the Agency. (e) aeroplanes, helicopters and powered parachutes having no more than two seats, a maximum take-off mass, as recorded by the Member States, of no more than: (i) 300 kg for a land plane/helicopter, single seater; or (ii) 450 kg for a land plane/helicopter, two seater; or (iii) 330 kg for an amphibian or floatplane/helicopter single seater; or (iv) 495 kg for an amphibian or floatplane/helicopter two seater, provided that, where operating both as a floatplane/helicopter and as a land plane/helicopter, it falls below both MTOM limits, as appropriate; (v) 472,5 kg for a land plane, two seater equipped with an airframe mounted total recovery parachute system; (vi) 315 kg for a land plane single-seater equipped with an airframe mounted total recovery parachute system; and, for aeroplanes, having the stall speed or the minimum steady flight speed in landing configuration not exceeding 35 knots calibrated air speed (CAS). (f) Single and two-seater gyroplanes with a maximum take off mass ≤ 560 kg. (g) Gliders with a maximum empty mass, of no more than 80 kg when single seater or 100 kg when two seater, including those which are foot launched. (h) Replicas of aircraft meeting the criteria of (a) or (d) above, for which the structural design is similar to the original aircraft. (i) Unmanned aircraft with an operating mass of no more than 150 kg. (j) Any other aircraft which has a maximum empty mass, including fuel, ≤ 70 kg.	

D. ICAO REFERENCE MATERIAL			
ICAO Doc 7300 Convention on International Civil Aviation			
Chapter 6	**International Standards and Recommended Practices**	**Article 37: Adoption of international standards and practices** To this end ICAO shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures	
ICAO Annex 6			
Chapter 8	**Aeroplane Maintenance**	**8.7: Approved maintenance organization**	
E. COMMISSION REGULATION (EC) No. 2042/2003 + 707/2006			
Article 1	**Objective and scope**	1. This Regulation establishes common technical requirements and administrative procedures for ensuring the continuing airworthiness of aircraft, including any component for installation thereto, which are: (a) registered in a Member State or (b) Registered in a third country and used by an operator for which a Member State ensures oversight of operations. 2. Paragraph 1 shall not apply to aircraft the regulatory safety oversight of which has been transferred to a third country and which are not used by a Community operator, or to aircraft referred to in Annex II to the basic Regulation. 3. The provisions of this Regulation related to commercial air transport are applicable to licensed air carriers as defined by Community law – See below	

Article 2	**Definitions**	(a) **aircraft** (c) **component** (d) **continuing airworthiness** (g) large aircraft (h) **maintenance** (i) **organisation** (j) **pre-flight inspection**	
	Other Definitions:	**Line and Base Maintenance** Ref.: AMC 145.A.10 Scope (a) Line Maintenance (c) Base Maintenance **HUMAN FACTORS** Ref.: 145.A.30 (e) Personnel requirements **HUMAN PERFORMANCE** Ref.: 145.A.30 (e) Personnel requirements **CERTIFICATION AUTHORISATION** Ref.: 145.A.35 Certifying staff and category B1 and B2 support staff	
Article 3	**Continuing airworthiness requirements** **Regulation (EC) 376/2007 of 30 March 2007** amending Regulation (EC) 2042/2003	1. The continuing airworthiness of aircraft and components shall be ensured i.a.w. the provisions of Annex I. 2. Organisations and personnel involved in the continuing airworthiness of aircraft and components, including maintenance, shall comply with the provisions of Annex I and where appropriate those specified in Articles 4 and 5. [Article 4 = Maintenance organisation approvals (Part-145); Article 5 = Certifying staff (Part-66)] 3. By derogation from paragraph 1, the continuing airworthiness of aircraft holding a permit to fly shall be ensured on the basis of the specific continuing airworthiness arrangements as defined in the permit to fly issued in accordance with the Annex (Part 21) to Commission Regulation (EC) No 1702/2003.	

Article 4	Maintenance organisation approvals	1. Organisations involved in the maintenance of • large aircraft or of • aircraft used for commercial air transport, and • Components intended for fitment thereto, hall be approved in accordance with the provisions of Annex II - Part-145. 2. Maintenance approvals issued or recognised by a Member State in accordance with the JAA requirements and procedures and valid before the entry into force of this Regulation shall be deemed to have been issued in accordance with this Regulation. 3. Personnel qualified to carry out and/or control a continued airworthiness non-destructive test of aircraft structures and/or components, on the basis of any standard recognized by a Member State prior to the entry into force of this Regulation as providing an equivalent level of qualification, may continue to carry out and/or control such tests.	
Article 7	**Entry into force** (1), (3)	1. This Regulation shall enter into force on the day following that of its publication in the Official Journal of the European Union. 3 By way of derogation from paragraph 1 and 2, Member States may elect not to apply the following provisions of Annex II, until 28 September 2008: - 145.A.30(g) as applicable to aircraft with a maximum take-off mass ≤ 5 700 kg - 145.A.30(h)(1) as applicable to aircraft with a maximum take-off mass ≤ 5 700 kg - 145.A.30(h)(2).	
COUNCIL REGULATION (EEC) No. 2407/1992	**Article 1**	1. This Regulation concerns requirements for the granting and maintenance of operating licences by Member States in relation to air carriers established in the Community. 2. The carriage by air of passengers, mail and/or cargo, performed by non-power driven aircraft and/or ultra-light power driven aircraft, as well as local flights not involving carriage between different airports, are not subject to this Regulation. In respect of these operations, national law concerning operating licences, if any, and	

		Community and national law concerning the air operator's certificate (AOC) shall apply.	
	Article 2	For the purposes of this Regulation: (a) 'undertaking' means any natural person, any legal person, whether profit-making or not, or any official body whether having its own legal personality or not; (b) 'air carrier' means an air transport undertaking with a valid operating licence; (c) 'operating licence' means an authorization granted by the Member State responsible to an undertaking, permitting it to carry out carriage by air of passengers, mail and/or cargo, as stated in the operating licence, for remuneration and/or hire; (d) 'air operator's certificate (AOC)' means a document issued to an undertaking or a group of undertakings by the competent authorities of the Member States which affirms that the operator in question has the professional ability and organization to secure the safe operation of aircraft for the aviation activities specified in the certificate;	

[OTHER DEFINITIONS]

Line and Base Maintenance
Ref.: AMC 145.A.10 Scope
(a) Line Maintenance
(c) Base Maintenance

Commercial Air Transportation
Ref.: Joint Aviation Requirements – JAR-1: Definitions and Abbreviations - IEM 1.1: Commercial Air Transportation

Commercial Air Transportation is not intended to cover Aerial Work or Corporate Aviation. 'Aerial Work' means an aircraft operation in which an aircraft is used for specialised services such as agriculture, construction, photography, surveying, observation and patrol, search and rescue, aerial advertisement, etc.

HUMAN FACTORS
Ref.: 145.A.30 (e) Personnel requirements

HUMAN PERFORMANCE
Ref.: 145.A.30 (e) Personnel requirements

CERTIFICATION AUTHORISATION
Ref.: 145.A.35 Certifying staff and category B1 and B2 support staff

F. GENERAL OVERVIEW OF PART-145

- **Legal basis of Part-145**
- **Reference codes and related material**
- **General structure of Part-145**

1. Legal Basis of Part-145

Text is based upon Regulation (EC) 1592/2002 and in particular, the following articles thereof:

A) Article 5.2(d) – Organisation approvals
B) Article 5.4(f) – Condition of issue, maintain, etc., organisation approvals
C) Article 5.4(g) – Condition of issue, maintain, etc., personnel certificates
D) Article 5.4(h) – Responsibilities of the holders of certificates

E) Articles 2 and 8 – Recognition of certificates
F) Article 10 – Flexibility provisions

2. Reference codes and related material

This annex is a transposition of Amendment 5 to JAR 145 dated January 1 2003, to which some additional changes have been made. The proposed text complies with ICAO Annex 6 Paragraph 8.7.

3. General structure of Part-145

- Definition of the Competent Authority (145.1)
- Section A: Technical Requirements
- Section B: Procedures for Competent Authorities

G. CROSS-REFERENCE BETWEEN PART-145 REQUIREMENTS AND SYLLABUS' CONTENTS		
ANNEX II – Part-145	**Subject**	**F = Full contents O = Overview X = Not Relevant**
145.1	**General**	**F**
SECTION A		
145.A.10	**Scope**	**F**
AMC 145.A.10	**Scope**	**F**
GM 145.A.10	**Scope**	**O**
145.A.15	**Application**	**F**
AMC 145.A.15	**Application**	**F**
Appendix III to AMC	**EASA Form 2 Part-145 Approval Application**	**O**
145.A.20	**Terms of approval**	**F**
Appendix II	**Organisations approval class and rating system**	**F**
AMC 145.A.20	**Terms of approval**	**F**
145.A.25 (a)	**Facility requirements**	**F**
145.A.25 (b)	**Facility requirements**	**F**
145.A.25 (c)	**Facility requirements**	**F**
145.A.25 (d)	**Facility requirements**	**F**
AMC 145.A.25 (a)	**Facility requirements**	**F**
AMC 145.A.25 (b)	**Facility requirements**	**F**
AMC 145.A.25(d)	**Facility requirements**	**F**
145.A.30 (a)	**Personnel requirements**	**F**

145.A.30 (b)	**Personnel requirements**	**F**
145.A.30 (c)	**Personnel requirements**	**F**
145.A.30 (d)	**Personnel requirements**	**F**
145.A.30 (e)	**Personnel requirements**	**F**
145.A.30 (f)	**Personnel requirements**	**F**
145.A.30 (g)	**Personnel requirements**	**F**
145.A.30 (h)	**Personnel requirements**	**F**
145.A.30 (i)	**Personnel requirements**	**F**
145.A.30 (j)	**Personnel requirements**	**F**
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AMC 145.A.30(b)	**Personnel requirements**	**F**
AMC 145.A.30 (c)	**Personnel requirements**	**F**
AMC 145.A.30 (d)	**Personnel requirements**	**F**
AMC 145.A.30 (e)	**Personnel requirements**	**F**
AMC 145.A.30 (f)	**Personnel requirements**	**F**
AMC 145.A.30 (g)	**Personnel requirements**	**F**
AMC 145.A.30 (h)(1)	**Personnel requirements**	**F**
AMC 145.A.30 (j)(4)	**Personnel requirements**	**O**
AMC 145.A.30 (j)(5)	**Personnel requirements**	**O**
AMC 145.A.30 (j)(5)(i)	**Personnel requirements**	**O**
AMC 145.A.30 (j)(5)(ii)	**Personnel requirements**	**O**
Appendix I to AMC	**EASA Form 4**	**O**
Appendix IV to AMC	**Fuel Tank Safety training**	**O**
GM 145.A.30 (e)	**Personnel requirements - Training syllabus for initial human factors training**	**O**
GM 145.A.30 (j)(4)	**Personnel requirements (Flight crew)**	**O**
145.A.35 (a)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (b)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (c)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (d)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (e)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (f)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (g)	**Certifying staff and category B1 and B2 support staff**	**F**

145.A.35 (h)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (i)	**Certifying staff and category B1 and B2 support staff**	**F**
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145.A.35 (k)	**Certifying staff and category B1 and B2 support staff**	**F**
145.A.35 (l)	**Certifying staff and category B1 and B2 support staff**	**F**
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AMC 145.A.35 (a)	**Certifying staff and category B1 and B2 support staff**	**F**
AMC 145.A.35 (b)	**Certifying staff and category B1 and B2 support staff**	**F**
AMC 145.A.35 (d)	**Certifying staff and category B1 and B2 support staff**	**O**
AMC 145.A.35 (e)	**Certifying staff and category B1 and B2 support staff**	**F**
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145.A.40 (a)	**Equipment, tools and material**	**F**
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AMC 145.A.40 (a)	**Equipment, tools and material**	**F**
AMC 145.A.40 (b)	**Equipment, tools and material**	**F**
145.A.42 (a)	**Acceptance of components**	**F**
145.A.42 (b)	**Acceptance of components**	**F**
145.A.42 (c)	**Acceptance of components**	**F**
145.A.42 (d)	**Acceptance of components**	**F**
AMC 145.A.42 (a)	**Acceptance of components**	**F**
AMC 145.A.42 (b)	**Acceptance of components**	**F**
AMC 145.A.42 (c)	**Acceptance of components**	**O**
AMC 145.A.42 (d)	**Acceptance of components**	**F**
145.A.45 (a)	**Maintenance data**	**F**
145.A.45 (b)	**Maintenance data**	**F**
145.A.45 (c)	**Maintenance data**	**F**
145.A.45 (d)	**Maintenance data**	**F**
145.A.45 (e)	**Maintenance data**	**F**
145.A.45 (f)	**Maintenance data**	**F**
145.A.45 (g)	**Maintenance data**	**F**
AMC 145.A.45 (b)	**Maintenance data**	**O**

AMC 145.A.45 (c)	**Maintenance data**	**F**
AMC 145.A.45 (d)	**Maintenance data**	**F**
AMC 145.A.45 (f)	**Maintenance data**	**F**
AMC 145.A.45 (g)	**Maintenance data**	**F**
145.A.47 (a)	**Production planning**	**F**
145.A.47 (b)	**Production planning**	**F**
145.A.47 (c)	**Production planning**	**F**
AMC 145.A.47 (a)	**Production planning**	**F**
AMC 145.A.47 (b)	**Production planning**	**F**
AMC 145.A.47 (c)	**Production planning**	**F**
145.A.50 (a)	**Certification of maintenance**	**F**
145.A.50 (b)	**Certification of maintenance**	**F**
145.A.50 (c)	**Certification of maintenance**	**F**
145.A.50 (d)	**Certification of maintenance**	**F**
145.A.50 (e)	**Certification of maintenance**	**F**
145.A.50 (f)	**Certification of maintenance**	**F**
Appendix I	**Use of the EASA Form 1 for maintenance**	**O**
AMC 145.A.50 (a)	**Certification of maintenance**	**O**
AMC 145.A.50 (b)	**Certification of maintenance**	**F**
AMC 145.A.50 (d)	**Certification of maintenance**	**F**
AMC 145.A.50 (e)	**Certification of maintenance**	**F**
AMC 145.A.50 (f)	**Certification of maintenance**	**F**
145.A.55 (a)	**Maintenance records**	**F**
145.A.55 (b)	**Maintenance records**	**F**
145.A.55 (c)	**Maintenance records**	**F**
AMC 145.A.55 (c)	**Maintenance records**	**F**
GM 145.A.55 (a)	**Maintenance records**	**F**
145.A.60 (a)	**Occurrence reporting**	**F**
145.A.60 (b)	**Occurrence reporting**	**F**
145.A.60 (c)	**Occurrence reporting**	**F**

145.A.60 (d)	**Occurrence reporting**	**F**
145.A.60 (e)	**Occurrence reporting**	**F**
AMC 145.A.60 (b)	**Occurrence reporting**	**F**
GM 145.A.60 (a)	**Occurrence reporting**	**F**
GM 145.A.60 (c)	**Occurrence reporting**	**F**
145.A.65 (a)	**Safety and quality policy, maintenance procedures and quality system**	**F**
145.A.65 (b)	**Safety and quality policy, maintenance procedures and quality system**	**F**
145.A.65 (c)	**Safety and quality policy, maintenance procedures and quality system**	**F**
AMC 145.A.65 (a)	**Safety and quality policy, maintenance procedures and quality system**	**F**
AMC 145.A.65 (b)	**Safety and quality policy, maintenance procedures and quality system**	**F**
AMC 145.A.65 (b)(2)	**Safety and quality policy, maintenance procedures and quality system**	**F**
AMC 145.A.65 (b)(3)	**Safety and quality policy, maintenance procedures and quality system**	**F**
AMC 145.A.65 (c)(1)	**Safety and quality policy, maintenance procedures and quality system.**	**F**
AMC 145.A.65 (c)(2)	**Safety and quality policy, maintenance procedures and quality system**	**F**
GM 145.A.65 (c)(1)	**Safety and quality policy, maintenance procedures and quality system**	**F**
145.A.70 (a)	**Maintenance organisation exposition**	**F**
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145.A.70 (c)	**Maintenance organisation exposition**	**F**
AMC 145.A.70 (a)	**Maintenance organisation exposition**	**O**
GM 145.A.70 (a)	**Maintenance organisation exposition**	**O**
145.A.75 (a)	**Privileges of the organisation**	**F**
145.A.75 (b)	**Privileges of the organisation**	**F**
145.A.75 (c)	**Privileges of the organisation**	**F**
145.A.75 (d)	**Privileges of the organisation**	**F**
145.A.75 (e)	**Privileges of the organisation**	**F**
AMC 145.A.75 (b)	**Privileges of the organisation**	**O**
145.A.80	**Limitations on the organisation**	**F**

AMC 145.A.80	**Limitations on the organisation**	**F**
145.A.85	**Changes to the organisation**	**F**
AMC 145.A.85	**Changes to the organisation**	**F**
145.A.90 (a)	**Continued validity**	**F**
145.A.90 (b)	**Continued validity**	**F**
145.A.95 (a)	**Findings**	**F**
145.A.95 (b)	**Findings**	**F**
145.A.95 (c)	**Findings**	**F**
SECTION B	**PROCEDURE FOR COMPETENT AUTHORITIES**	
145.B.01	Scope	X
145.B.10	Competent authority	X
AMC 145.B.10 (1)	*Competent authority - General*	*X*
AMC 145.B.10 (3)	*Competent authority – Qualification and training*	*X*
AMC 145.B.10 (4)	*Competent authority - Procedures*	*X*
145.B.15	Organisations located in several Member States	X
145.B.17	**Acceptable means of compliance**	**F**
145.B.20	**Initial approval**	**F**
AMC 145.B.20 (1)	**Initial approval**	**F**
AMC 145.B.20 (2)	**Initial approval**	**F**
AMC 145.B.20 (3)	**Initial approval**	**F**
AMC 145.B.20 (5)	*Initial approval*	*X*
AMC 145.B.20 (6)	**Initial approval**	**F**
Appendix II to AMC	*Part-145 Approval Recommendation Report EASA Form 6*	*X*
145.B.25	**Issue of approval**	**F**

Appendix III	**Approval certificate (EASA Form 3)**	**O**
AMC 145.B.25 (1)	**Issue of approval**	**O**
AMC 145.B.25 (2)	**Issue of approval**	**F**
AMC 145.B.25 (3)	*Issue of approval*	*X*
145.B.30	**Continuation of an approval**	**F**
AMC 145.B.30 (1)	**Continuation of an approval**	**O**
AMC 145.B.30 (2)	**Continuation of an approval**	**O**
145.B.35	**Changes**	**F**
AMC 145.B.35	**Changes**	**F**
AMC 145.B.35 (1)	**Changes**	**F**
145.B.40	**Maintenance organisation exposition (MOE) amendements**	**O**
AMC 145.B.40	**MOE amendments**	**F**
145.B.45	**Revocation, suspension and limitation of approval**	**F**
145.B.50	**Findings**	**F**
AMC 145.B.50 (a)	**Findings**	**F**
AMC 145.B.50 (b)	**Findings**	**F**
145.B.55	*Record-keeping*	X
AMC 145.B.55	*Record-keeping*	*X*
145.B.60	*Exemptions*	X

H. DETAILED CONTENTS AND LEVEL OF DETAIL EXPECTED (Full contents / Specific Paragraphs / Overview)			
COMPETENT AUTHORITY			
145.1	**General**	The Competent Authority for organisations: • Having their principal place of business in a Member State. • Having their principal place of business located in a third country.	*Full contents*
GENERAL ISSUES			
145.A.10	**Scope**	This Section establishes the requirements to be met by an organisation to qualify for the issue or continuation of an approval for the maintenance of aircraft and components.	*Full contents*
AMC 145.A.10	**Scope**	Line Maintenance as any maintenance that is carried out before flight to ensure that the aircraft is fit for the intended flight. Examples of what may be included in Line Maintenance. Occasional performance of base maintenance tasks by line maintenance organisations; conditions. Maintenance tasks outside these criteria are considered to be Base M. Aircraft maintained in accordance with "progressive" type programmes. Meaning of "located within a Member State"; related guidance. Organisations using facilities both inside and outside a Member State; related guidance.	*Full contents*
GM 145.A.10	**Scope**	How the smallest organisations can satisfy the intent of Part-145. Overview of key elements.	*Overview*
145.A.60	**Occurrence Reporting**	Obligation to report any identified condition of the aircraft or component that has resulted or may result in an unsafe condition	*Full contents*

	+ ED DECISION 2003/12/RM (AMC-20) – AMC 20-8 Occurrence Reporting Overview **+ DIRECTIVE 2003/42/EC On occurrence reporting in civil aviation**	that hazards seriously the flight safety. Involved parties. Internal occurrence reporting system. Purpose. Identification of adverse trends and corrective actions. Evaluation of all known relevant information relating to occurrences. Circulation of the information as necessary. Reports in a form and manner established by the Agency. Completeness. Reference to AMC 20-8. Reporting to a commercial air operator as applicable. Deadlines for reporting. Reference to Directive 2003/42/EC and its national implementation.	+ *Overview*
AMC 145.A.60(b)	**Occurrence Reporting**	The aim of occurrence reporting. Need to enable and encourage free and frank reporting. Establishment of a just culture. Personnel not to be inappropriately punished for reporting or co-operating with occurrence investigations. The internal reporting process should be closed-loop. Importance of feedback to reportees to ensure their continued support.	*Full contents*
GM 145.A.60(a)	**Occurrence Reporting**	Guidance about the organisation responsible for the design (normally the TC holder of the aircraft, engine or propeller and/or if known the STC holder).	*Full contents*
GM 145.A.60(c)	**Occurrence Reporting**	List of the information that should be contained as a minimum in each report.	*Full contents*
SCOPE OF AMO			
145.A.20	**Terms of approval**	Organisation shall specify the scope of work deemed to constitute approval in its exposition (Appendix II contains a table of all classes and ratings).	*Full contents*

Appendix II	**Organisations approval class and rating system**	Full extent of approval possible under Part-145 (Table 1) Approval ratings and limitations (privileges). Scope of work indication in the MOE (defines the exact limits of approval). Category A class rating. Category B class rating. Category C class rating. Category D class rating. Category A class ratings subdivided into 'Base' or 'Line' maintenance. The 'limitation' section. Lengthy capability list – procedures for amendment. Part-145 approved maintenance organisation employing only 1 person.	*Full contents*
AMC 145.A.20	**Terms of approval**	ATA specification 100 chapter for category C component rating (overview)	*Overview*
Link To Part-M Responsibilities			
M.A.201	**Responsibilities**	Owner (lessee) responsibilities for continuing airworthiness of aircraft. In the case of large aircraft a CAMO is required. In the case of commercial air transport the operator is responsible for the continuing airworthiness of the aircraft it operates (CAMO "inside"). Maintenance of • large aircraft, • aircraft used for commercial air transport and • components thereof …shall be carried out by a Part-145 AMO.	*Selected elements*

AMC M.A.201(h)1(3	**Responsibilities**	The operator is responsible • for determining what maintenance is required • when it has to be performed and • by whom and • to what standard …in order to ensure the continued airworthiness of the aircraft being operated.	*Overview*
M.A.708	**Continuing airworthiness management**	Activities of the approved CAMO: • maintenance programme development and approval • **ensuring that all maintenance is carried out in accordance with the approved maintenance programme and released in accordance with M.A. Subpart H – Link to 145.A.50**, • control of all applicable airworthiness directives and operational directives with a continuing airworthiness impact • ensuring that all defects discovered during scheduled maintenance or reported are corrected by an appropriately approved maintenance organisation, • ensuring that the aircraft is taken to an appropriately approved maintenance organisation whenever necessary, • coordinate of scheduling maintenance, the application of airworthiness directives, the replacement of service life limited parts, and component inspection to ensure the work is carried out properly, • etc.	*Overview*

M.A.708	**Continuing airworthiness management**	In case of commercial air transport, when the operator is not appropriately approved to Part-145, the operator shall establish a **written maintenance contract** between the operator and a Part-145 approved organisation.	**Link CAMO / AMO** *Selected elements*
AMC M.A.708	**Continuing airworthiness management**	Where • an operator is not approved under Part-145 or • an operator's maintenance organisation is an independent organisation, a contract should be agreed between the operator and a maintenance organisation approved under Part-145, which specifies, in detail, the work to be performed by the maintenance organisation (**Appendix XI to this AMC**). • Specification of work and the assignment of responsibilities • Procedures and responsibilities to ensure that all maintenance work is performed, service bulletins are analysed and decisions taken on accomplishment, airworthiness directives are completed on time and that all work, including non-mandatory modifications is carried out to approved data and to the latest standards	*Selected elements*
Appendix XI to AMC to M.A.708(c)	**CONTRACTED MAINTENANCE**	**Maintenance contracts** A **list of the main points** that should be addressed, when applicable, in a maintenance contract between an Operator and a Part-145 AMO.	**Contract** *Overview*
M.A.708	**Continuing airworthiness management**	For component maintenance, including engine maintenance, the contract as referred to in paragraph (c) may be in the **form of individual work orders** addressed to the Part-145 maintenance organisation.	**Work Order** *Selected elements*

AMC M.A.708(c) (1)	**Continuing airworthiness management – Unscheduled maintenance**	The use of **one time work orders**	**Work Order** *Overview*
ORGANISATION REQUIREMENTS			
145.A.25	**Facility requirements**	Facilities to be appropriate for all planned work. Protection from the weather elements. Specialised workshops and bays segregated as appropriate. For base maintenance of aircraft, hangars available / large enough. For component maintenance, workshops large enough. Office accommodation for management of planned work and certifying staff. Working environment appropriate for the task to be carried out. Effectiveness of personnel not to be impaired (temperatures, dust, contamination, lighting, noise, specific environmental conditions as applicable). Working environment for line maintenance; suspension of tasks in case environment deteriorates to unacceptable level. Secure storage facilities for components, equipment, tools and material. Segregation of serviceable items from unserviceable items. Conditions of storage in accordance with the manufacturer's instructions. Access to storage facilities restricted to authorised personnel.	*Full contents*
AMC 145.A.25(a)	**Facility requirements**	Proof of tenancy if the hangar is not owned by the organisation. Sufficiency of hangar space to carry out planned base maintenance to be demonstrated by a projected aircraft **hangar visit plan** relative to the maintenance programme (to be updated on a regular basis).	*Full contents* Link to **Maintenance Man-hour plan**

		Protection from the weather elements – means of compliance. Access to hangar accommodation for line maintenance for usage during inclement weather (scheduled work, lengthy defect rectification). Maintenance staff should have an area where they may study maintenance instructions and complete maintenance records in a proper manner.	
AMC 145.A.25(b)	**Facility requirements**	Criteria for combination of office accommodation.	*Full contents*
AMC 145.A.25(d)	**Facility requirements**	Storage facilities for serviceable components – means of compliance. Storage racks strong enough. All components should remain packaged to minimise damage / corrosion.	*Full contents*
145.A.30	**Personnel requirements**	Accountable Manager and related requirements. Nominated person, or group of persons, ensuring that the organisation complies with this Part, and ultimately responsible to the accountable manager. Related requirements. Procedures for deputising. Appointment of a person with responsibility for monitoring the quality system and associated feedback system as required by 145.A.65(c). Direct access to the AM to ensure info on quality / compliance matters. Maintenance man-hour plan showing that the organisation has sufficient staff in accordance with the approval. Procedure to reassess work intended to be carried out when actual staff availability is less than planned for a work shift or period.	*Full contents* Link to **Hangar visit plan**

		Obligation to establish and control the competence of personnel involved in any maintenance, management and/or quality audits. Related competence requirements, including human factors / human performance. Qualification requirements for personnel who carry out and/or control non-destructive test of aircraft structures and/or components. Qualification requirements for personnel who carry out any other specialised task. Provisions for colour contrast dye penetrant tests. Certifying staff requirements in the case of line maintenance. Certifying staff requirements in the case of base maintenance for large aircraft. Certifying staff requirements in the case of base maintenance for aircraft other than large aircraft. Possible derogations for the use of certifying staff qualified in accordance with different provisions under certain circumstances. One-off authorisations. All derogations to be reported to the competent authority within seven days of the issuance of such certification authorisation. The organisation issuing the one-off authorisation shall ensure that any such maintenance that could affect flight safety is re-checked by an appropriately approved organisation.	
AMC 145.A.30(a)	**Personnel requirements**	AM normally intended to mean the chief executive officer of the AMO. Overall (including financial) responsibility for running the organisation. AM may be the AM for more than one organisation. AM is not required to be knowledgeable on technical matters. When the AM is not the CEO, need to demonstrate that he has direct access to CEO and has a sufficiency of 'maintenance funding' allocation.	*Full contents*

AMC 145.A.30(b)	**Personnel requirements**	Management structure. Independence of the quality compliance monitoring staff. Functions may be subdivided or combined in any number of ways. Base maintenance manager. Line maintenance manager. Workshop manager. Quality manager. All manager should report to the accountable manager. Special provisions for small Part-145 AMO. The base maintenance manager – responsibilities. The line maintenance manager – responsibilities. The workshop manager – responsibilities. Organisation may adopt any title for the managerial positions but should identify to the competent authority the titles and persons chosen to carry out these functions. Where an organisation appoints managers for all or any combination of the identified Part-145 functions, these managers shall report ultimately to the accountable manager. Certifying staff may report to any of the managers specified so long as the quality compliance monitoring staff remain independent.	*Full contents*
Appendix I to AMC	**EASA Form 4**	Overview of EASA Form 4.	*Overview*
Appendix IV to AMC	**Fuel Tank Safety training Introduced by ED Decision 2007/02/R**	Overview of instructions for providing training on Fuel Tank Safety issues: • levels of training • personnel qualification • general requirements	*Overview*

		• characteristics of the training	
AMC 145.A.30(c)	**Personnel requirements**	Monitoring the **quality system** includes requesting **remedial action** as necessary by the AM and the nominated persons.	*Full contents*
AMC 145.A.30(d)	**Personnel requirements**	Criteria for having "sufficient staff" Employed staff / contracted staff Maintenance man-hour plan to take into account any maintenance carried out on aircraft / aircraft components from outside the Member State and all work carried out outside the scope of the Part-145approval. Maintenance man-hour plan should relate to the anticipated maintenance work load; in case of short term contracts, it should be based upon the minimum workload needed for commercial viability. Maintenance work load includes all necessary work (examples). Correlation of maintenance man-hour plan with the aircraft hangar visit plan and/or the aircraft component planned maintenance, as applicable. Quality monitoring compliance function man-hours should be sufficient. Maintenance man-hour plan to be reviewed at least every 3 months. Significant deviations to be reported to QM and AM for review. Definition of significant deviation.	**Maintenance man-hour plan + Key elements of the hangar visit plan** *Full contents*
AMC 145.A.30(e)	**Personnel requirements As amended by ED Decision 2007/02/R**	Planners, mechanics, specialised services staff, supervisors and certifying staff to be assessed for competence by 'on the job' evaluation and/or by examination relevant to their job role before unsupervised work is permitted.	*Full contents*

		Records of qualification and competence assessment to be kept. Adequate initial and recurrent training to be provided and recorded to ensure continued competence. Job descriptions are recommended to support assessment for: • Planners • Mechanics • Specialised services staff • Supervisors • Certifying staff • Quality audit staff Objectives of the assessment for the various professional roles Knowledge of organisational procedures as applicable Quality audit staff to be able to monitor compliance and to identify non compliances in an effective and timely manner to ensure the organisation remains in compliance with Part-145. Human factors and human performance issues. Initial / Continuation training in human factors. Personnel involved. Initial human factors training – minimum contents. Timeframe for training. HF continuation training. Purpose. Duration. Who can conduct HF training? Human factors training procedures to be specified in the MOE. Additional training in fuel tank safety, inspection standards and maintenance procedures, especially for those involved in compliance of CDCCL tasks.	

AMC 145.A.30(f)	**Personnel requirements As amended by ED Decision 2006/11/R**	Continued airworthiness non-destructive testing – meaning Appropriately qualified – meaning The European Standard 4179:2000 (**EN 4179**) National aerospace non destructive testing (**NDT**) boards Particular non-destructive test – meaning. Any Part-145 AMO that carries out NDT should establish NDT specialist qualification procedures in the MOE and accepted by the authority. Meaning of "officially recognised standard" as per ED Decision 2006/11/R. Boroscoping and other techniques such as delamination coin tapping are non-destructive **inspections** rather than testing The Part-145 AMO should establish an procedure in the MOE, accepted by the competent authority, to ensure that personnel who carry out and interpret such inspections are properly trained and assessed for their competence with the process. Non-destructive inspections, not being considered as NDT by Part-145, are not listed in Appendix 2 under class rating D1. The referenced standards, methods, training and procedures should be specified in the MOE. Any personnel who intend to carry out and/or control a non-destructive test for which they were not qualified prior to the effective date of Part-145 should qualify for such test in accordance with EN 4179.	*Full contents*
AMC 145.A.30(g)	**Personnel requirements**	Meaning of "**minor scheduled line maintenance**" for the purpose of this paragraph List of typical tasks permitted after appropriate task training for the purpose of issuing an aircraft certificate of release to service.	Category A line maintenance tasks Full contents
AMC 145.A.30(h)(1)	**Personnel requirements**	Category B1 and B2 support staff need not hold a certifying authorisation the organisation may use such appropriately authorised CS to satisfy the requirement.	*Full contents*

Appendix IV	**Conditions for the use of staff not qualified to Part-66 i.a.w. 145.A.30 (j) 1 and 2**	Overview of conditions ensuring that certifying staff not qualified to Part-66 will meet the intent of 145.A.30(j)(1) and (2).	*Overview*
AMC 145.A.30(j)(4)	**Personnel requirements**	Requirements for the issue of a limited certification authorisation to the commander or flight engineer. Procedures to be developed and published in the MOE. List of typical tasks that may be certified and/or carried out by the commander holding an ATPL or CPL (minor maintenance / simple checks). Conditions for holders of a valid Flight engineers licence on the aircraft type. List of other typical minor maintenance / simple defect rectification tasks that may be carried out. Authorisation to have a finite life of twelve months subject to satisfactory re-current training on the applicable aircraft type.	*Full contents*
AMC 145.A.30(j)(5)	**Personnel requirements**	Explanations of "**unforeseen**" for the purposes of this paragraph. Criteria to issue a one-off authorisation. When a one-off authorisation should not be issued. Due consideration to be given to the complexity of the work involved and the availability of required tooling and/or test equipment needed.	*Overview*
GM 145.A.30 (e)	**Personnel requirements - Training syllabus for initial human factors training Overview**	Overview of the proposed training syllabus for human factors training. The organisation may combine, divide, change the order of any subject to suit its own needs, so long as all subjects are covered to a level of detail appropriate to the organisation and its personnel. Some of the topics may be covered in separate training, in which case duplication of training is not necessary.	

		Practical illustrations / examples should be used (accident / incident reports). Topics should be related to existing legislation. Topics should be related to existing guidance/ advisory material. Topics should be related to maintenance engineering where possible Too much unrelated theory should be avoided.	
GM 145.A.30(j)(4)	**Personnel requirements (Flight crew)**	Overview of the theoretical knowledge and examination subjects related to the issuance of a limited certification authorisation to the commander and/or the flight engineer on the basis of the flight crew licence held.	*Overview*
145.A.35	**Certifying staff and category B1 and B2 support staff**	Issuance of certification authorisation. Certifying staff and category B1 and B2 support staff shall have an adequate understanding of the relevant aircraft and/or components to be maintained together with the associated organisation procedures. In the case of certifying staff, this must be accomplished before the issue or re-issue of the certification authorisation. Meaning of 'Category B1 and B2 support staff'. Meaning of 'Relevant aircraft and/or components'. Meaning of 'Certification authorisation'. Excepting those cases in 145.A.30(j), the organisation may only issue a certification authorisation to certifying staff in relation to the basic categories or subcategories and any type rating listed on the aircraft maintenance licence, subject to the licence remaining valid throughout the validity period of the authorisation and the certifying staff remaining in compliance with Part 66.	*Full contents*

		Currency - at least six months of actual relevant aircraft or component maintenance experience in any consecutive two year period. Meaning. Continuation training in each two year period. Programme for continuation training. The organisation shall assess all prospective certifying staff (except where any of the unforeseen cases of 145.A.30(j)(5) apply) for their competence, qualification and capability to carry out their intended certifying duties, in accordance with a procedure as specified in the exposition prior to the issue or re-issue of a certification authorisation. Issue of certification authorisation (conditions, contents, continued validity). Certification authorisation's scope shall clear to the certifying staff and any authorised person who may require to examine the authorisation. Where codes are used to define scope, the organisation shall make a code translation readily available. Meaning of 'Authorised person'. The person responsible for the quality system is responsible on behalf of the organisation for issuing certification authorisations to certifying staff. He may nominate other persons to actually issue or revoke the certification authorisations in accordance with a procedure as specified in the MOE. Record of all certifying staff and category B1 and B2 support staff. Contents of such records. Preservation of records.	

		Upon request, the organisation shall furnish certifying staff with a copy of their record on leaving the organisation. The certifying staff shall be given access on request to their personal records. The organisation shall provide certifying staff with a copy of their certification authorisation in either a documented or electronic format. Certifying staff shall produce their certification authorisation to any authorised person within 24 hours. Minimum age for certifying staff and category B1 and B2 support staff.	
AMC 145.A.35(a)	**Certifying staff and category B1 and B2 support staff**	Meaning of "adequate understanding of the relevant aircraft and/or aircraft component(s) to be maintained". The organisation should hold copies of all documents related to qualification and recent experience.	*Full contents*
AMC 145.A.35(b)	**Certifying staff and category B1 and B2 support staff**	Issuance of the certification authorisation when compliance has been established with the appropriate paragraphs of Part-145 and Part-66. The AMO needs to be satisfied that the person holds a valid Part-66 AML and may need to confirm such fact with the competent authority of the Member State that issued the licence.	*Full contents*
AMC 145.A.35(d)	**Certifying staff and category B1 and B2 support staff**	Continuation training: • A two way process to ensure that certifying staff remain current and that the organisation receives feedback on the adequacy of its procedures and maintenance instructions. • It covers changes in relevant requirements such as Part-145, changes in organisation procedures and the modification standard of the products being maintained plus human factor issues identified.	*Overview*

		• It should also address instances where staff failed to follow procedures and the reasons why particular procedures are not always followed. Continuation training delivery: • Sufficient duration and content related to relevant quality audit findings • Keeping certifying staff updated in terms of relevant technology, procedures and human factors issues few days of such training. Method of training = a flexible process; the elements, general content and length should be specified in the MOE unless training is undertaken by a Part-147 maintenance training organisation, when such details may be specified under the approval and cross referenced in the MOE.	
AMC 145.A.35(e)	**Certifying staff and category B1 and B2 support staff Full contents**	The programme should list all certifying staff and support staff and when training will take place, the elements of such training and an indication that it was carried out as planned. Such info to be transferred to the certifying staff and support staff record.	*Full contents*
AMC 145.A.35(f)	**Certifying staff and category B1 and B2 support staff**	Prospective certifying staff are required to be assessed for competence, qualification and capability related to intended certifying duties. Criteria to perform such an assessment. How to assess competence and capability. How to assess qualification.	*Full contents*
AMC 145.A.35 (j)	**Certifying staff and category B1 and B2 support staff Full contents**	List of the minimum information to be kept on record for each certifying person or category, as applicable. The record may be kept in any format but should be controlled by	*Full contents*

		the organisation's quality department. Persons authorised to access the system = a minimum, to ensure that records cannot be altered in an unauthorised manner or that such confidential records become accessible to unauthorised persons. The competent authority is an authorised person when investigating the records system for initial and continued approval or when the competent authority has cause to doubt the competence of a particular person.	
145.A.40	**Equipment, tools and material** **As amended by ED Decision 2006/11/R**	Need to have available and use the necessary equipment, tools and material to perform the approved scope of work. If the manufacturer specifies a particular tool or equipment, the organisation shall use that tool or equipment, unless the use of alternatives is agreed by the competent authority via procedures specified in the MOE. and tools must be permanently available, except in the case of tools or equipment that is so infrequently used that its permanent availability is not necessary. Such cases shall be detailed in a MOE procedure. For base maintenance = sufficient aircraft access equipment and inspection platforms/docking such that the aircraft can be properly inspected. All tools, equipment and particularly test equipment, as appropriate, are controlled and calibrated according to an officially recognised standard at a frequency to ensure serviceability and accuracy. Records of such calibrations and traceability to the standard used shall be kept. Meaning of "officially recognised standard" as per ED Decision 2006/11/R.	*Full contents*

AMC 145.A.40(a)	**Equipment, tools and material**	Need to show that all tools and equipment as specified in the maintenance data can be made available when needed. All tools and equipment that require to be controlled in terms of servicing or calibration (i.e. measuring specified dimensions and torque figures, etc) should be clearly identified and listed in a control register, including any personal tools and equipment that the organisation agrees can be used.	*Full contents*
AMC 145.A.40(b)	**Equipment, tools and material**	Control of tools and equipment = procedure to inspect/service and, where appropriate, calibrate such items on a regular basis and indicate to users that the item is within any inspection or service or calibration time-limit. A clear system of labelling all tooling, equipment and test equipment is necessary giving information on when the next inspection or service or calibration is due and if the item is unserviceable for any other reason. A register should be maintained for all precision tooling and equipment together with a record of calibrations and standards used. Inspection, service or calibration on a regular basis should be in accordance with the equipment manufacturers' instructions unless the organisation can demonstrate that a different time period is appropriate in a particular case.	*Full contents*
145.A.42	**Acceptance of components**	All components to be classified and segregated into the following categories: • Components in a satisfactory condition, released on an EASA Form 1 or equivalent and marked in accordance with Part-21 Subpart Q. • Unserviceable components.	*Full contents*

		• Unsalvageable components classified in accordance with 145.A.42(d). • Standard parts used when specified in the manufacturer's illustrated parts catalogue and/or the maintenance data. • Raw and consumable material which should meet the required specification and has appropriate traceability + accompanying documentation. Eligibility of components to be checked prior to installation, when different modification and/or airworthiness directive standards may be applicable. Fabrication of a restricted range of parts to be used in the course of work within its own facilities provided procedures are identified in the MOE. Components having reached life limit or with non-repairable defect shall be classified as unsalvageable and shall not re-enter the system (unless certified life limits are extended or a repair is approved i.a.w. Part-21).	
AMC 145.A.42(a)	**Acceptance of components Full contents**	List of documents equivalent to an EASA Form 1.	*Full contents*
AMC 145.A.42(b)	**Acceptance of components As amended by ED Decision 2007/02/R**	EASA Form 1 identifies the eligibility and status of an aircraft component. Importance of Block 13 "Remarks". The receiving organisation should be satisfied that the component is in satisfactory condition and has been appropriately released to service. The organisation should ensure that the component meets the approved data/standard, i.e. by reference to the manufacturer's parts catalogue or other approved data (i.e. Service Bulletin). Ensuring compliance with applicable ADs, the status of any life	*Full contents*

		limited parts fitted to the aircraft component, as well as Critical Design Configuration Control Limitations.	
AMC 145.A.42(c)	**Acceptance of components**	**Fabrication of parts – principles and conditions to consider** • Agreement by the competent authority = formalised through approval of a detailed procedure in the MOE. • Fabrication, inspection assembly and test should be clearly within the technical and procedural capability of the organisation. • All data to fabricate the part should be approved either by the competent authority or the TC holder or Part-21 DOA holder, or STC holder. • Possible sources of data. • Items fabricated by a Part-145 organisation may only be used by that organisation in the course of overhaul, maintenance, modifications, or repair of aircraft or components undergoing work within its own facility. • The permission to fabricate does not constitute approval for manufacture, or to supply externally and the parts do not qualify for an EASA Form One. • Etc. (criteria applicable to specific conditions / circumstances). • Examples of fabrication under the scope of a Part-145 approval. • Inspection and Identification. • Adequate records to be maintained of all such fabrication processes. • Parts to carry a part number clearly relating them to the manufacturing / inspection data.	*Overview*

		• Organisation's identity should be marked on the part for traceability.	
AMC 145.A.42(d)	**Acceptance of components**	Examples of types of components typically classified as unsalvageable. The risk of such components later being misrepresented and sold as serviceable components. Caution should be exercised to ensure that unsalvageable components are disposed of in a manner that does not allow them to be returned to service.	*Full contents*
Link to Part-M	**Subpart E Components**		
M.A.501	**Installation** **As amended by ED Decision 2006/14/R**	No component may be fitted unless it is in a satisfactory condition, has been appropriately released to service on an EASA Form 1 or equivalent and is marked in accordance with Part 21 Subpart Q, unless otherwise specified in Part- 145 and Subpart F. Obligation of an approved maintenance organisation prior to installation (component eligibility - applicable modification standards + ADs) Standard parts (specified in maintenance data) • should be accompanied by evidence of conformity traceable to the applicable standard Raw material and consumable material • shall only be used on an aircraft or a component when the aircraft or component manufacturer states so in relevant maintenance data or (as specified in Part-145) • Material should meet the required specification and has appropriate traceability) • Accompanied documentation	*Selected elements*

		Definition of "Standard parts" as per ED Decision 2006/14/R	
M.A.502	**Component maintenance**	The maintenance of components shall be performed by: • appropriately approved Subpart F or • art-145 maintenance organisations Maintenance on any component may be performed by M.A.801(b)2 certifying staff: • only when components are fitted to the aircraft • Such components can be temporarily removed for maintenance when such removal is expressly permitted by the aircraft maintenance manual to improve access	*Selected elements*
M.A.503	**Service life limited components**	Service life limited components shall not exceed the approved service life limit as per MP and ADs.	*Selected elements*
M.A.504	**Control of unserviceable components**	A component shall be considered unserviceable when: • expiry of the service life limit as defined in the MP • Non-compliance with the applicable ADs and other continued airworthiness requirement mandated by the Agency. • Absence of the necessary information to determine the airworthiness status or eligibility for installation. • Evidence of defects or malfunctions. • Involvement in an incident or accident likely to affect its serviceability. Unserviceable components shall be identified and stored in a secure location (controlled by M.A.502 approved)	*Selected elements*

		Components with reached certified life limit or non-repairable defects • shall be classified as unsalvageable and • shall not be permitted to re-enter the component supply system, (exemptions - M.A.304) Any person or organisation accountable under Part-M shall, in the case of a paragraph (c) unsalvageable components: • retain such component in the paragraph (b) location, or; • arrange for the component to be mutilated in a manner that ensures that it is beyond economic salvage or repair • before relinquishing responsibility for such component A person or organisation accountable under Part-M • may transfer responsibility of components classified as unsalvageable to an organisation for training or research without mutilation.	
145.A.45	**Maintenance data**	Obligation hold and use applicable current maintenance data in the performance of maintenance, including modifications and repairs. Meaning of "applicable". The case of maintenance data provided by an operator or customer. Applicable maintenance data for the purposes of this Part (detailed list).	*Full contents*

		Procedures to ensure that any inaccurate, incomplete or ambiguous procedure, practice, information or maintenance instruction contained in the maintenance data is recorded and notified to the author. The organisation may modify maintenance instructions in accordance with a MOE procedure, when demonstrating that changes will result in equivalent or improved maintenance standards. The TC holder shall be informed. Meaning of "maintenance instructions" for the purposes of this paragraph. Providing a common work card or worksheet system to be used throughout relevant parts of the organisation. Obligation either to transcribe accurately the maintenance data onto work cards or worksheets, or to make precise reference to the particular maintenance task or tasks contained in such maintenance data. Work cards and worksheets computer generated / managed; requirements. Transcription of complex maintenance tasks onto work cards / worksheets. When providing maintenance to an operator who requires its work card or worksheet system to be used, then such system may be used; procedure to ensure correct completion of the operators' work cards or worksheets. All applicable maintenance data to be readily available for use when required by maintenance personnel. Procedure to ensure that maintenance data is kept up to date. Provisions in the case of customer controlled / provided maintenance data.	

Link to Part-M Subpart D Maintenance Standards			
M.A.401	**Maintenance data** **Selected elements**	The person or organisation maintaining an aircraft shall have access to and use only applicable current maintenance data in the performance of maintenance, including modifications and repairs. Applicable maintenance data is: • List of the data (specifically: any applicable data issued in accordance with 145.A.45(d)) All applicable maintenance data shall be: • current and • readily available for use • when required. Work card or worksheet system.	
M.A.403	**Aircraft defects**	Only the authorised certifying staff according to Part-145 can decide, using M.A.401 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.	*Selected elements*
AMC **145.A.45(b)**	**Maintenance data** **As amended by** **ED Decision 2007/02/R**	Holding and using the minimum maintenance data relevant to the organisation's approval class rating. Common minimum maintenance data (including CDCCL) and exceptions. Detailed list of the maintenance data for an organisation with an approval class rating in category A – Aircraft Detailed list of the maintenance data for an organisation with an approval class rating in category B – Engines/APUs Detailed list of the maintenance data for an organisation with an approval class rating in category C – Components other than complete engines/APUs Detailed list of the maintenance data for an organisation with an approval class rating in category D – Specialised services	*Overview*

AMC 145.A.45(c)	**Maintenance data Full contents**	Processing of inaccurate, incomplete or ambiguous information in the maintenance data. The Part-145 organisation shall notify the problem to the author of the maintenance data in a timely manner. A record of such communications should be retained by the Part-145 until such time as the TC holder has clarified the issue. The procedure should be specified in the MOE.	*Full contents*
AMC 145.A.45(d)	**Maintenance data As amended by ED Decision 2007/02/R Full contents**	Need for a practical demonstration by the mechanic to the quality personnel of the proposed modified maintenance instruction. When satisfied the quality personnel should approve the modified maintenance instruction and ensure that the TC or STC holder is informed. Traceability of the complete process from start to finish Relevant maintenance instruction shall clearly identify the modification. Modified maintenance instructions should only be used in: … CDCCL are airworthiness limitations: any modification of maint. instructions linked to CDCCL are an aircraft modification to be approved i.a.w. Part-21.	*Full contents*
AMC 145.A.45 (f)	**Maintenance data**	Availability of data to the relevant parts of the organisation Work-cards (content and structure) Supplementary work-cards or worksheets	*Full contents*
AMC 145.A.45 (g)	**Maintenance data As amended by ED Decision 2007/02/R**	To keep data up to date, a procedure should be set up to monitor the amendment status of all data and maintain a check that all amendments are being received by being a subscriber to any document amendment scheme. Special attention to be given to TC related data (certification life limited parts, airworthiness limitations and airworthiness limitations items, etc). Data being made available to personnel maintaining aircraft means …	*Full contents*

		Where computer systems are used... Where microfilm or microfiche readers/printers are used…	
Link to Part-M Subpart Continuing Airworthiness			
M.A.302	**Maintenance programme**	A maintenance programme approved by the competent authority	*Selected elements*
M.A.303	**Airworthiness directives**	Obligation to carry out any applicable AD within the requirements of that AD, unless otherwise specified by the Agency.	*Selected elements*
M.A.304	**Data for modifications and repairs**	Obligation to assess damages and to carry out modifications and repairs using data **approved** by the Agency or by an approved Part-21 design organisation, as appropriate.	*Selected elements*
Link to Regulation (EC) 1702/2003 Part-21 Subpart A General Provision			
21.A.3B	**Airworthiness Directives**	To clarify the obligation to carry out any applicable AD, the requirements of 21.A.3B (Airworthiness Directives) shall be summarised: (a) in detail, (b) overview, (c) in detail (items 1 ÷ 5) • What an AD is • When an AD shall be issued • Responsibilities of the TC / STC holder • Minimum contents of an AD: identification of the unsafe condition, identification of the affected aircraft, action(s) required, compliance time for the required action(s), date of entry into force.	*Overview*
Link to Regulation (EC) 1702/2003 Part-21 Subpart D (Changes to type-certificates and restricted type-certificates)			
Part-21 Subpart E (STCs)		To clarify M.A.304 requirements, the following elements of Part-21 Subpart D, Subpart E and Subpart M shall be summarised:	

Part-21 Subpart M (Repairs) **Selected elements (overview)**		21.A.91 Classification of changes in type design (Changes in type design are classified as minor and major. Minor change definition) 21.A.435 Classification of repairs (A repair may be 'major' or 'minor' - ref. to 21A.9; a repair shall be classified 'major' or 'minor' either by the Agency, or by an appropriately approved design organisation under a procedure agreed with the Agency) 21.A.92 Eligibility (Only the TC holder may apply for approval of a major change to a type design under this Subpart; all other applicants for a major change to a type design shall apply under Subpart E)	
	21.A.107: To be described in details due to its influence to the aircraft continuing airworthiness (CAMO has to consider these additional data).	21.A.107 Instructions for continued airworthiness (The holder of a minor change approval to type design shall furnish at least one set of the associated variations, if any, to the instructions for continued airworthiness of the product on which the minor change is to be installed; changes to those variations of the instructions for continued airworthiness shall be made available to all known operators of a product incorporating the minor change and shall be made available, on request, to any person required to comply with any of those instructions) 21.A.111 Scope (STC) (This Subpart establishes the procedure for the approval of major changes to the type design under supplemental type certificate procedures, and establishes the rights and obligations of the applicants for, and holders of, those certificates. Note: Compare with the 21A.92 Eligibility)	
	21.A.120: To be described in details due to its influence to the aircraft continuing airworthiness (CAMO has to consider these additional data).	21.A.120 Instructions for continued airworthiness (The holder of the STC shall furnish at least one set of the associated variations, if any, to the instructions for continued airworthiness of the product on which the minor change is to be installed, changes to those variations of the instructions for continued airworthiness shall be made available to all known operators of a product incorporating the minor change and shall be made available, on request, to any person required to comply with any of those instructions).	

		21.A.431 Scope (Repairs) (This Subpart establishes the procedure for the approval of repair design, and establishes the rights and obligations of the applicants for, and holders of, those approvals; Definition of a "repair" = elimination of damage and/or restoration to an airworthy condition following initial release into service by the manufacturer of any product, part or appliance; Elimination of damage by replacement of parts or appliances without the necessity for design activity shall be considered as a maintenance task and shall therefore require no approval under this Part) 21.A.432 Eligibility (Any natural or legal person that has demonstrated, or is in the process of demonstrating, its capability under 21A.432 B shall be eligible as an applicant for a major repair design approval under the conditions laid down in this Subpart) 21A.432B Demonstration of capability (DOA or alternative procedure to demonstrate its capability - An applicant for a major repair design approval shall demonstrate its capability by holding a design organisation approval, issued by the Agency i.a.w. Subpart J; by way of derogation, as an alternative procedure to demonstrate its capability, an applicant may seek Agency agreement for the use of procedures setting out the specific design practices, resources and sequence of activities necessary to comply with this Subpart). 21.A.437 Issue of a repair design approval (by the Agency, or by an appropriately approved organisation that is also the type-certificate or the supplemental type-certificate holder, under a procedure agreed with the Agency, or for minor repairs only, by an appropriately approved design organisation under a procedure agreed with the Agency) 21.A.439 Production of repair parts (Under Subpart F of Part-21, or by an organisation appropriately approved i.a.w. Subpart G of Part-21, or by an appropriately approved maintenance organisation. (ref. Scope of the approval of this organisation) 21.A.441 Repair embodiment (The embodiment of a repair shall be made by an appropriately approved maintenance organisation, or	

		by a production organisation appropriately approved i.a.w. Subpart G, under 21A.163 privilege. The design organisation shall transmit to the organisation performing the repair all the necessary installation instructions) 21.A.443 Limitations (A repair design may be approved subject to limitations, in which case the repair design approval shall include all necessary instructions and limitations. These instructions and limitations shall be transmitted by the repair design approval holder to the operator i.a.w. a procedure agreed with the Agency).	
	21.A.445 (Un-repaired damage): To be described in details due to its influence to the aircraft continuing airworthiness (CAMO has to consider these additional data)	21.A.445 Unrepaired damage (when a damaged product, part or appliance, is left un-repaired, the evaluation of the damage for its airworthiness consequences may only be made by the Agency, or by an appropriately approved design organisation under a procedure agreed with the Agency). 21.A.447 Record keeping (Responsibility of the repair design approval holder)	
	21.A.449: To be described in details due to its influence to the aircraft continuing airworthiness (CAMO has to consider these additional data)	21.A.449 Instructions for continued airworthiness (The holder of the repair design approval shall furnish at least one complete set of those changes to the instructions for continued airworthiness which result from the design of the repair, comprising descriptive data and accomplishment instructions prepared i.a.w. the applicable requirements, to each operator of aircraft incorporating the repair. The repaired product, part or appliance may be released into service before the changes to those instructions have been completed, but this shall be for a limited service period, and in agreement with the Agency. Those changes to the instructions shall be made available on request to any other person required to comply with any of the terms of those changes to the instructions. The availability of some manual or portion of the changes to the instructions for continued airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight — hours/cycles. If updates to those changes to the instructions for continued airworthiness are issued by the holder of the repair design approval after the repair has been first approved, these updates	

		shall be furnished to each operator and shall be made available on request to any other person required to comply with any of the terms of those changes to the instructions. A programme showing how updates to the changes to the instructions for continued airworthiness are distributed shall be submitted to the Agency)	
145.A.47	**Production planning**	A system appropriate to the amount and complexity of work to plan availability of all necessary resources Planning of tasks and shifts taking into account human performance limitations. Adequate hand over of relevant information when it is required to hand over the continuation or completion of maintenance tasks	*Full contents*
AMC 145.A.47(a)	**Production planning**	The production planning function includes two complementary elements: • scheduling the maintenance work ahead to ensure that it will not adversely interfere with other work as regards the availability of all necessary personnel, tools, equipment, material, data and facilities • during maintenance work, organising maintenance teams and shifts and provide all necessary support to ensure the completion of maintenance without undue time pressure. Aspects to be considered when establishing a production planning procedure.	*Full contents*
AMC 145.A.47(b)	**Production planning**	Meaning of "limitations of human performance" in the context of planning safety related tasks.	*Full contents*
AMC 145.A.47(c)	**Production planning**	Objective of the changeover / handover information. Effective task and shift handover - the three basic elements.	*Full contents*

145.A.50	**Certification of maintenance**	When a certificate of release to service shall be issued. Verifications to be performed. No non-compliances that hazard seriously the flight safety. A CRS shall be issued before flight at the completion of any maintenance. New defects or incomplete maintenance work orders identified … If the operator declines to have such maintenance carried out ... A CRS shall be issued at the completion of any maintenance on a component whilst off the aircraft. The EASA Form 1 is the component certificate of release to service. When an organisation maintains a component for its own use, an EASA Form 1 may not be necessary depending upon MOE procedures. Provisions in case the organisation is unable to complete all maintenance. Provisions in case an aircraft is grounded at a location other than the main line station / main maintenance base due to non-availability of a component.	*Full contents*
Link to Part-M **Certificate Of Release To Service - CRS**			
M.A.801	**Aircraft certificate of release to service**	(a) **Except for aircraft released to service by a Part-145 organisation**, the certificate of release to service shall be issued according to this Subpart.	*Selected elements*
AMC **145.A.50(a)**	**Certification of maintenance** **As amended by** **ED Decision 2007/02/R**	A component maintained off the aircraft needs the issue of a CRS for such maintenance and another CRS in regard to being installed properly on the aircraft when such action occurs. In the case of base maintenance this means a separate task sign off for the maintenance and installation tasks.	*Overview*

		When an organisation maintains a component for use by the organisation, an EASA Form 1 may not be necessary depending upon the internal release procedures defined in the MOE. Meaning of "hazard seriously the flight safety". Examples. Provisions in the case of the issue of EASA Form 1 for components in storage prior to Part-145 and Part-21 and not released on an EASA Form 1 or equivalent in accordance with 145.A.42(a), or removed serviceable from a serviceable aircraft or an aircraft which have been withdrawn from service. Overview of the specific provisions outlined in § 2 for each situation: • new / unused aircraft components • used aircraft components removed from a serviceable aircraft • used aircraft components removed from aircraft withdrawn from service • used aircraft components maintained by organisations not approved i.a.w. Part-145. At any task carried out to a fuel system feature classified as CDCCL, before release to service, records to reflect that correct configuration is maintained / ensured. Marking = "CDCCL task".	
AMC 145.A.50(b)	**Certification of maintenance**	The statement which should be contained in the CRS. CRS should relate to the task specified in the manufacturer's / operator's instruction or the aircraft maintenance program, which may cross-refer to a manufacturer's/operator's instruction in a maintenance manual, SB etc. The date such maintenance was carried out should include when the maintenance took place relative to any life or overhaul limitation.	*Full contents*

		When extensive maintenance has been carried out the CRS may summarise the maintenance (but unique cross-reference to the work-pack containing full details of maintenance carried out). Dimensional information to be retained in the work-pack record. The person issuing the CRS should use his normal signature. Usage of a computer release to service system. Only the particular person shall be able to electronically issue the release to service; possible solutions. A certification stamp is optional.	
AMC 145.A.50(d)	**Certification of maintenance**	The purpose of the certificate of release to service. The EASA Form 1 is called the authorised release certificate. The certificate is to be used for export/import/domestic purposes, and is an official certificate from the manufacturer/maintenance organisation to users. It is not a delivery or shipping note, and can only be issued by organisations approved by the competent authority within the scope of the approval. The certificate may be used as a rotable tag – applicable conditions. Under no circumstances may a certificate be issued for any item when it is known that the item has a defect considered a serious hazard to flight safety. Certificate not to be issued when it is known that the item is unserviceable. Exception to such rule - applicable conditions; clear statement in Block 13. Aircraft may not be released using the certificate.	*Full contents*
AMC 145.A.50(e)	**Certification of maintenance**	Meaning of "being unable to establish full compliance with Part-145.A.50 (a)". The aircraft operator is responsible for ensuring that all required maintenance has been carried out before flight, therefore 145.A.50 (e) requires the operator to be informed if full	*Full contents*

		compliance with 145.A.50 (a) cannot be achieved within the operators limitations. If the operator agrees to the deferment of full compliance, then the CRS may be issued subject to details of the deferment, including the operator's authority, being endorsed on the certificate. Whether or not the aircraft operator does have the authority to defer maintenance is an issue between the aircraft operator and its Member State. In case of doubt concerning such a decision of the operator, the AMO should inform its Member State before issue of the CRS, for further investigation. 145. A.50 (a) does not normally permit the issue of a CRS in the case of non compliance; procedure should state actions to be taken to bring the matter to the attention of the aircraft operator, to discuss and resolve such issue. Responsible persons to be kept informed in writing of such situations.	
AMC 145.A.50(f)	**Certification of maintenance**	Meaning of "suitable release certificate". Meaning of "compliance with all other Part-145 and operator requirements" = making an appropriate entry in the aircraft technical log, etc.	**Link to M.A.306 Operator's technical log system** *Full contents*
Appendix I	**Use of the EASA Form 1 for maintenance**	Overview of the contents of Appendix I. Requirements applicable to the certificate and to its use. Completion of the EASA Form 1.	*Overview*
145.A.55	**Maintenance records**	Recording all details of maintenance work carried out. Minimum records to be retained, including subcontractor's release docs.	*Full contents*

		A copy of each CRS to be given to the aircraft operator together with copy of approved repair/modification data used for repairs/modifications carried out. Preservation of a copy of all detailed maintenance records and any associated maintenance data for two years from the date the aircraft or component to which the work relates was released from the organisation. Safe storage of records. Storage of computer backup discs, tapes etc. Distribution or storage of retained maintenance records in case a Part-145 organisation terminates its operation.	
AMC 145.A.55(c)	**Maintenance records**	Meaning of "associated maintenance data". This does not necessarily require the retention of all Aircraft Maintenance Manual, Component Maintenance Manual, IPC etc issued by the TC holder or STC holder. Maintenance records should refer to the revision status of the data used.	*Full contents*
GM 145.A.55(a)	**Maintenance records**	The importance of properly executed and retained records for owners, operators and maintenance personnel. Secure and easily retrievable records with comprehensive / legible contents. Basic details of serialised components and other significant components installed, to ensure traceability to documentation and maintenance data. Provisions for engines of a modular design. Reconstruction of lost or destroyed records - guidance.	*Full contents*

		Reconstructed records should be accepted by the competent authority. Additional maintenance may be required. Record = either a paper or computer system or any combination of both. Paper systems – requirements. Computer systems – requirements. Safeguards against unauthorised alterations.	
Link to Part-M Continuing Airworthiness Records			
M.A.305	**Aircraft continuing airworthiness record system Selected elements**	Obligation to enter a certificate of release to service in the aircraft continuing airworthiness records at the completion of any maintenance. Required continuing airworthiness records. Minimum contents of the aircraft continuing airworthiness records. Control of the continuing airworthiness records. Requirements for entries made in the continuing airworthiness records. Minimum preservation periods of the continuing airworthiness records.	
M.A.306	**Operator's technical log system Selected elements**	In the case of commercial air transport, in addition to the requirements of M.A.305, there is the obligation to use an aircraft technical log system. Minimum contents of the technical log system, for each aircraft. Approval by the Competent Authority. Minimum preservation periods of the aircraft technical log.	

MAINTENANCE PROCEDURES AND QUALITY SYSTEM			
145.A.65	**Safety and quality policy, maintenance procedures and quality system**	The safety and quality policy, to be included in the MOE. Procedures agreed by the competent authority, taking into account human factors and human performance, to ensure good maintenance practices and compliance with this Part. Clear work order or contract such that aircraft / components may be released to service in accordance with 145.A.50. Maintenance procedures under this § apply to 145.A.25 to 145.A.95 and shall cover all aspects of carrying out the maintenance activity, including the provision and control of specialised services, and lay down the standards to which the organisation intends to work. For line and base maintenance, procedures to minimise the risk of multiple errors and capture errors on critical systems. No person to carry out / inspect a maintenance task involving disassembly/reassembly of several components of the same type fitted to more than one system on the same aircraft during a maintenance check. When only one person is available, work card / worksheet shall include an additional re-inspection after completion of all the same tasks. Procedures to ensure that damage is assessed and modifications and repairs are carried out using data approved by the Agency or by a Part-21 approved design organisation, as appropriate. The quality system, including: • Independent audits - Requirements, purpose, the smallest organisation; • A quality feedback reporting system - Requirements, purpose.	*Full contents*
AMC 145.A.65(a)	**Safety and quality policy, maintenance procedures and quality system**	Minimum contents of the safety and quality policy.	*Full contents*

AMC 145.A.65(b)	**Safety and quality policy, maintenance procedures and quality system Full contents**	Maintenance procedures should be held current and reflect best practice. All employees shall report any differences (occurrence reporting). All procedures, and changes, should be verified and validated before use where practicable. Technical procedures should be designed and presented in accordance with good human factors principles.	
AMC 145.A.65(b)(2)	**Safety and quality policy, maintenance procedures and quality system Full contents**	Specialised services = any specialised activity, such as, but not limited to non destructive testing requiring particular skills and/or qualification. 145.A.30(f) covers the qualification of personnel. Need to establish maintenance procedures that cover the control of any specialised process.	
AMC 145.A.65(b)(3)	**Safety and quality policy, maintenance procedures and quality system As amended by ED Decision 2007/02/R Full contents**	The purpose of this procedure = minimise the possibility of an error being repeated, compromising more than one system. Examples. Procedures to detect and rectify maintenance errors that could result in a failure, malfunction, or defect endangering the safe operation of the aircraft. The procedure should identify the method for capturing errors, and the maintenance tasks or processes concerned. Maintenance tasks to be primarily reviewed to assess their impact on safety. Additional information to be processed. To prevent omissions, every task / group of tasks should be signed-off. To ensure completion, sign-off only after completion. Work by unauthorised personnel to be checked before sign-off. The grouping of tasks should allow critical steps to be clearly	

		identified. Meaning of the "sign-off" statement. Meaning of "authorised personnel" (not necessarily being "certifying staff"). Ensuring that CDCCL are not compromised. Procedures when necessary. Attention to adverse effects of any wiring change (i.e. segregation of fuel gauging wiring system = CDCCL). Prevention through training. The importance of maintaining ignition prevention features properly.	
AMC 145.A.65(c)(1)	**Safety and quality policy, maintenance procedures and quality system**	The primary objectives of the quality system. The independent audit as an essential element of the quality system. The independent audit as a process. Contents, purpose. Random audits on a sample basis when maintenance is being carried out. The quality audit plan. All aspects of Part-145 compliance to be checked every 12 months. Audits may be carried out as a complete single exercise or subdivided over the year period i.a.w. a scheduled plan. Guidance about checking procedures against product lines. Sample checks of products. Guidance. The smallest organisation. Line stations. Plan to audit each station at a frequency consistent with flight activity at the particular station, but not exceeding 24 months.	*Full contents*

		Provisions in order to increase audit time periods. The audit report. How to ensure the independence of the audit. Guidance for large / medium sized / small maintenance organisations.	
AMC 145.A.65(c)(2)	**Safety and quality policy, maintenance procedures and quality system**	The quality feedback system as an essential element of the quality system. The feedback system may not be contracted to outside persons. The principal function of the quality feedback system. Audit report to be sent to the relevant department(s) for rectification action with target rectification dates; discussion / confirmation of rectification dates. Rectification of findings by the relevant department. Information to the quality department / quality auditor of such rectification. Regular meetings between AM and staff to check progress on rectification. Provisions for large organisations. Management of records. Preservation periods.	*Full contents*
GM 145.A.65(c)(1)	**Safety and quality policy, maintenance procedures and quality system**	Guidance on one acceptable working audit plan. List to be tailored for the particular situation. All line stations to be audited at the frequency agreed by the competent authority within the limits of AMC 145.A.65(b).	*Full contents*
145.A.70	**Maintenance organisation exposition**	Meaning of 'Maintenance organisation exposition'. The organisation shall provide the competent authority with a MOE.	*Full contents*

		Detailed list of key information that shall be contained in the MOE. The MOE shall be amended as necessary to remain up-to-date. The MOE and any subsequent amendment shall be approved by the competent authority; minor amendments may be approved through a MOE procedure (indirect approval).	
AMC 145.A.70(a)	**Maintenance organisation exposition** **As amended by** **ED Decision 2007/02/R**	Information to be included in the MOE. Some information may be kept as separate documents or on separate electronic data files subject to the management part of said exposition containing a clear cross reference to such documents or electronic data files. Any subject order can be used, provided all applicable subjects are covered. Where an organisation uses a different format, the MOE should contain a cross reference Annex using this list as an index with an explanation as to where in the exposition the subject matter can be found. MOE to contain info, as applicable, on how the organisation complies with CDCCL instructions and how the completion of CDCCL is traced. Small maintenance organisations may combine the various items. The operator may use electronic data processing (EDP) for publication. MOE to be made available to the competent authority in an acceptable form. Compatibility of EDP systems with dissemination of the MOE. Recommended index of MOE.	*Overview*

GM 145.A.70(a)	**Maintenance organisation exposition**	The purpose of the MOE. Compliance with its contents will assure compliance with the requirements of Part-145, which is a pre-requisite to obtaining and retaining a certificate. The 'management' part of the MOE. The list of certifying staff may be produced as a separate document. The working procedures of the organisation. Personnel to be familiar with those parts of the manuals that are relevant to the maintenance work they carry out. Responsibilities to amend the manual to be specified. The quality manager should be responsible for monitoring the amendments and submission of the proposed amendments to the competent authority. Indirect approval of the MOE. The four main parts to be covered by the MOE. The accountable manager's exposition statement – an example. Whenever the accountable manager changes the new accountable manager shall the statement at the earliest opportunity. Failure to carry out this action could invalidate the Part-145 approval. When an organisation is approved against any other Part containing a requirement for an exposition, a supplement covering the differences will suffice to meet the requirements except that the supplement should have an index showing where those parts missing from the supplement are covered.	*Overview*

145.B.40	**Maintenance organisation exposition (MOE) amendments**	Management of amendments to the MOE: • Direct approval • Indirect approval	*Overview*
AMC 145.B.40	**Maintenance organisation exposition (MOE) amendments**	Competent authority may define some class of amendments to the MOE which may be incorporated without prior authority approval. A procedure should be stated in the amendment section of the MOE. The MOE chapter dealing with scope of work/approval should not be subject to this procedure. Each MOE amendment to be submitted to the competent authority. Procedures to be followed for direct / indirect approval.	*Full contents*
APPLICATION			
145.A.15	**Application**	Application for the issue or variation of an approval to be made to the competent authority in a form and manner established by such authority.	*Full contents*
AMC 145.A.15	**Application**	"In a form and in a manner established by the competent authority" means that the application should be made on an **EASA Form 2.**	*Full contents*
Appendix III to AMC EASA Form 2	**Part-145 Approval Application**	Overview of EASA Form 2.	*Overview*
FINDINGS			
145.A.95	**Findings**	Definition of level 1 finding and level 2 finding. AMO needs to define a corrective action plan and demonstrate corrective action to the satisfaction of the competent authority within an agreed period, after receipt of notification of findings according to 145.B.50.	*Full contents*

145.B.50	**Findings**	Actions to be taken by the competent authority when evidence is found showing non-compliance to the Part-145 requirements. For level 1 findings, immediate action shall be taken to revoke, limit or suspend in whole or in part, depending upon the extent of the finding, the organisation approval, until successful corrective action has been taken. For level 2 findings, the competent authority shall grant a Corrective action period appropriate to the nature of the finding that shall not be more than three months. In certain circumstances, at the end of this first period, and subject to the nature of the finding the competent authority can extend the three month period subject to a satisfactory corrective action plan. Action shall be taken by the competent authority to suspend in whole or part the approval in case of failure to comply within the timescale granted.	*Full contents*
AMC 145.B.50 (a)	**Findings**	Explanation of "level 1" findings and examples. For a level 1 finding the competent authority may need to ensure that further maintenance and re-certification of all affected products is accomplished. Explanation of "level 2" findings and examples.	*Full contents*
AMC 145.B.50 (b)	**Findings**	Where the organisation has not implemented the necessary corrective action within the defined period it may be appropriate to grant a further period of up to three months, subject to the competent authority notifying the AM. In exceptional circumstances and subject to a realistic action plan being in place, the competent authority may vary the maximum 6 month corrective action period. In granting such a change the past performance of the organisation should be considered.	*Overview*

PRIVILEGES			
145.A.75	**Privileges of the organisation**	Organisations are entitled to carry out the following tasks i.a.w. the MOE: • Maintain aircraft / component for which it is approved at the locations identified in the approval certificate and in the MOE. • Arrange for maintenance of aircraft / component for which it is approved at another organisation working under the quality system of the organisation (such organisation not being approved to carry out such maintenance under Part 145; limited to the work scope permitted under 145.A.65(b) procedures). Excluding: base maintenance check, complete workshop maintenance check / overhaul of an engine / engine module. • Maintain aircraft / component for which it is approved at any location if such a need arises due to unserviceability of the aircraft or need to support occasional line maintenance; conditions specified in the MOE; • Maintain aircraft / component for which it is approved at a line maintenance location capable of supporting minor maintenance, only if the MOE permits such activity and lists such locations; • Issue CRS in respect of completion of maintenance i.a.w. 145.A.50.	*Full contents*
AMC 145.A.75(b)	**Privileges of the organisation**	Explanation of "working under the quality system of an organisation appropriately approved under Part-145": an organisation not appropriately Part-145 approved may carry out aircraft line maintenance / minor engine maintenance / maintenance of components / specialised services as a subcontractor for an organisation appropriately Part-145 approved.	*Full contents*

		Obligation to have a procedure for control of such subcontractors in order for the organisation to be approved to subcontract. An AMO carrying out maintenance for another AMO within its own approval scope is not a "subcontractor" for the purpose of this paragraph. FAR 145 is more restrictive about activities that can be contracted or sub-contracted - any listing of contracted / sub-contracted organisations should identify which meet Part-145 criteria and which meet FAR 145 criteria. Meaning of "maintenance of engines or engine modules other than a complete workshop maintenance check or overhaul". Fundamentals of sub-contracting under Part-145. Reasons for allowing a Part-145 AMO to sub-contract maintenance tasks. Meaning of "maintenance carried out under the sub-contract control system". Implications for sub-contractor's facilities, personnel and procedures. Organisation's responsibility to ensure such requirements are satisfied. Organisation is not required to have complete facilities for sub-contracted maintenance but should have its own expertise to determine that the sub-contractor meets the necessary standards. Organisation cannot be approved unless it has the in-house facilities, procedures, expertise to carry out majority of maintenance for which it wishes to be approved in terms of class ratings.	

		Use of specialist subcontractors to certify the release to service of particular products. Need to demonstrate the necessary expertise and procedures to control such sub-contractors. Organisation working outside the scope of its approval schedule. Sub-contract control of another organisation Part-145approved. Authorisation to sub-contract is indicated by acceptance of MOE having a specific procedure on the control of sub-contractors. Part-145 procedures for the control of subcontractors not Part-145 approved. Pre-audit procedure. Purpose. Assessment of foreseen use of the sub-contractor's facilities. Paperwork, personnel, approved data and material/spare parts to be used. Use of tools, equipment and personnel from the sub-contractor. Supervision of inspection and release from the sub-contractor. Using own staff or authorising the sub-contractor's staff. Issuance of the certificate of release to service. The certificate of release to service and the EASA Form 1 to be issued always under the maintenance organisation approval reference. The sub-contract control procedure – requirements. Revocation process for sub-contractors who do not meet the requirements. Audit of the sub-contract control section / sample audit of sub-contractors. The contract should contain a provision for the competent authority and EASA to have right of access to the sub-contractor.	
LIMITATIONS			
145.A.80	**Limitations on the organisation**	The organisation shall only maintain an aircraft or component for which it is approved when all the necessary	*Full contents*

		• facilities, • equipment, • tooling • material • maintenance data and • certifying staff are available	
AMC 145.A.80	**Limitations on the organisation** **Full contents**	Explanation of the purpose of this paragraph = to cover the situation where an organisation may temporarily not hold all the necessary tools, equipment etc., for an aircraft type or variant specified in the organisation's approval. No need to amend the approval to delete the aircraft type or variants if it is a temporary situation and there is a commitment from the organisation to re-acquire tools, equipment etc. before performing maintenance on the type.	*Full contents*
ISSUE OF APPROVAL			
145.B.20	**Initial approval**	The competent authority shall indicate in writing its acceptance of the personnel, specified in 145.A.30 (a) and (b). The competent authority shall verify that the procedures specified in the MOE comply with Part-145 and that the accountable manager signs the commitment statement. The competent authority shall verify that the organisation is in compliance with the requirements of Part-145. A meeting with the AM at least once during the investigation for approval to ensure that he/she fully understands the significance of the approval and the reason for signing the MOE commitment of the organisation to compliance with the procedures specified in the MOE. All findings must be confirmed in writing to the organisation. The competent authority shall record all findings, closure actions (actions required to close a finding) and recommendations	*Full contents*

		For initial approval all findings must be corrected before the approval can be issued.	
AMC 145.B.20 (1)	**Initial approval**	Meaning of "Formally indicate in writing" (EASA Form 4). Applicability of EASA Form 4. Acceptance of the accountable manager. The competent authority may reject an accountable manager where there is clear evidence that they previously held a senior position in any JAR / Part approved Organisation and abused that position by not complying with the particular JAR / Part requirements.	*Full contents*
AMC 145.B.20 (2)	**Initial approval**	Verification that the organisation complies with the exposition procedures should be established by the competent authority approving the MOE.	*Full contents*
AMC 145.B.20 (3)	**Initial approval**	For a large organisation, either one large team audit or a short series of small team audits or a long series of single man audits may be appropriate. Criteria to perform audit against different product lines. The surveyor should always be accompanied throughout the audit by a senior technical member of the organisation (normally the quality manager). The surveyor should inform the senior technical member of the organisation at the end of the audit visit on all findings made during the audit.	*Full contents*
AMC 145.B.20 (6)	**Initial approval**	Findings to be recorded on an audit report form with a provisional categorisation as a level 1 or 2, and then to be reviewed, adjusted if necessary, and become "confirmed".	*Full contents*

		All findings to be confirmed in writing to the organisation within 2 weeks. Dealing with situations in which there is uncertainty about compliance.	
145.B.25	**Issue of approval** **Full contents**	Competent Authority shall formally approve the MOE and issue an EASA Form 3 approval certificate (see Appendix III) including the approval ratings. Certificate to be issued only when the organisation is part-145 compliant. Conditions of approval to be indicated on the approval certificate. The reference number.	*Full contents*
Appendix III	**Approval certificate – EASA Form 3**	Details on the format: • Reference Number • Approval schedule i.a.w. Appendix II "Approval class and ratings" • The organisation shall be entitled to carry out the following tasks (145.A.75 Privileges of the organisation) • Maintain any aircraft and/or component for which it is approved at the locations identified in the approval certificate and in the exposition	*Overview*
AMC 145.B.25 (1)	**Issue of approval**	Granting of approvals involving more than one Member – criteria The approval should be based only upon the organisational capability (including associated sub-contractors) relative to Part-145 and not limited by reference to EASA / national type certificated products.	*Overview*

		The competent authority should indicate approval of the MOE in writing.	
AMC 145.B.25 (2)	**Issue of approval**	The validity of the Part-145 approval should be of unlimited duration.	*Full contents*
CONTINUED OVERSIGHT			
145.A.90	**Continued validity**	Approval issued for an unlimited duration. Conditions for the approval to remain valid: • organisation remaining in compliance with this Part • proper handling of findings as per 145.B.40 • granting access to the competent authority • certificate not being surrendered or revoked Approval to be returned to competent authority upon surrender / revocation.	*Full contents*
145.B.30	**Continuation of an approval**	The continuation of an approval shall be monitored in accordance with the applicable 'initial approval' process under 145.B.20. The competent authority shall keep and update a program listing the approved maintenance organisations under its supervision, the dates when audit visits are due and when such visits were carried out. Each organisation must be completely reviewed for compliance with Part-145 at periods not exceeding 24 months. A meeting with the accountable manager shall be convened at least once every 24 months to ensure he/she remains informed of significant issues arising during audits.	*Full contents*
AMC 145.B.30 (1)	**Continuation of an approval**	Conditions for the competent authority surveyor(s) to claim credit for specific item audits completed during the preceding 23 month	*Overview*

		period.	
AMC 145.B.30 (2)	**Continuation of an approval Overview**	Ongoing aspects of the Part-145 approval to be monitored. At the successful conclusion of the audit including approval of the MOE, an audit report form (EASA Form 6) should be completed including all recorded findings, closure actions / recommendations. The accountable manager should be seen at least once every 24 months to ensure he fully understands the significance of the approval. For line stations the competent authority can adopt a sampling program based upon number of line stations and complexity.	*Overview*
CHANGES			
145.A.85	**Changes to the organisation**	AMO shall notify to the competent authority any proposal to carry out any of the following changes, before such changes take place: • Name of the organisation. • Main location of the organisation. • Additional locations of the organisation. • The accountable manager. • any of the persons nominated under 145.A.30(b); • Facilities, equipment, tools, material, procedures, work scope and certifying staff that could affect the approval. When proposed changes in personnel are not known to the management beforehand, these changes shall be notified at the earliest opportunity.	*Full contents*
AMC 145.A.85	**Changes to the organisation Full contents**	The purpose of this paragraph is to enable the AMO to remain approved if agreed by the competent authority during negotiations about any of the specified changes, otherwise the approval would automatically be suspended in all cases.	*Full contents*
145.B.35	**Changes**	The competent authority shall receive notification from the organisation of any proposed change as listed in 145.A.85.	*Full contents*

		The competent authority shall comply with the applicable elements of the initial process paragraphs for any change to the organisation. The competent authority may prescribe the conditions under which organisation may operate during such changes unless it determines that the approval should be suspended.	
AMC 145.B.35 (1)	**Changes**	Changes to the Part-145 approval include the following: • Name change • Address change • Approval scope and rating • New base facility The applicable part/s of the EASA Form 6 should be used for the change.	*Full contents*
REVOCATION, SUSPENSION, LIMITATION			
145.B.45	**Revocation, suspension and limitation of approval**	The competent authority shall: • suspend an approval on reasonable grounds in case of potential safety threat or • Suspend, revoke or limit an approval pursuant to 145.B.50 [Findings].	*Full contents*
PART-66 RELATED ACTIVITIES			
66.A.45	**Type/task training and ratings**	The holder of a category A aircraft maintenance licence may only exercise certification privileges on a specific aircraft type following the satisfactory completion of the relevant category A aircraft task training carried out by an appropriately approved	*Selected elements*

		Part-145 or Part-147 organisation. The training shall include practical hands on training and theoretical training as appropriate for each task authorised. Satisfactory completion of training shall be demonstrated by an examination and/or by workplace assessment carried out by an appropriately approved Part-145 or Part-147 organisation. Aircraft type ratings shall be granted following satisfactory completion of the relevant category B1, B2 or C aircraft type training approved by the competent authority or conducted by an appropriately approved Part-147 maintenance training organisation. Note: Appropriate specifications shall be defined in the MOE.	
66.B.105	**Procedure for the issue of an aircraft maintenance licence via the Part-145 approved maintenance organisation**	A **Part-145** maintenance organisation which has been authorised to carry out this activity by the competent authority may prepare the aircraft maintenance licence on behalf of the competent authority or make recommendations to the competent authority. The Part-145 maintenance organisation shall ensure compliance with 66.B.100 (a) and (b). In all cases, the competent authority shall issue the aircraft maintenance licence. Note: Appropriate specifications shall be defined in the MOE.	*Selected elements*
66.B.100	**Procedure for the issue of an aircraft maintenance licence by the competent authority**	On receipt of EASA Form 19 [application for an aircraft maintenance licence or amendment to such licence] and any supporting documentation, the EASA Form 19 shall be verified for completeness and it shall be ensured that the experience claimed meets the requirement of Part 66. An applicant's examination status shall be verified and/or the validity of any credits shall be confirmed to ensure that all	*Selected elements*

		required modules of Appendix 1 have been met as required by Part 66. Note: Appropriate specifications shall be defined in the MOE.	
PART-147 RELATED ACTIVITIES			
147.A.100	**Facility requirements**	For basic training course **Part-145** may provide basic training workshops and/or maintenance facilities for Part-147. Written agreement shall be made with such organisation specifying the conditions of access and use thereof. Note: Appropriate specifications shall be defined in the MOE.	*Selected elements*
147.A.105	**Personnel requirements**	When another organisation is used to provide practical training and assessments, such other organisation's staff may be nominated to carry out practical training and assessments. Note: Appropriate specifications shall be defined in the MOE.	*Selected elements*