INTRODUCTION OF NEW REGULATIONS

TITLE – CAR 145 AMENDMENT

By:
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CAR 145 Amendments

Introduction

Existing CAR 145 has been adopted since 2006

Newly amended CAR 145
“AIRWORTHINESS REGULATION – CHAPTER 3
CAR 145 APPROVED MAINTENANCE ORGANIZATION”
Issue: July 2011

Enter into force – 1 July 2011
Effective – 1 January 2012
CAR 145 Amendments

Significant Changes:

1. (NOTE – Any changes will be denoted by Vertical Bar against the CAR, AMC or GM)

2. Introduction of Definition of Commercial & Non-commercial Air Transport (CAR 145.1)

3. Mandatory Training for Maintenance personnel in Fuel Tank Safety (CAR 145.30)

4. AMO compliance to Critical Design Configuration Control Limitation (CDCCL) limitation, procedures during maintenance, repair & modifications (CAR 145.65/CAR 145.70)
CAR 145 Amendments

Significant Changes:

5. Defining the acceptable Authorised Release Certificates for UAE Registered Aircraft (CAR 145.42)

6. AW Form 1 - Adopting the Latest EASA Form 1 Format (CAR 145.50)

7. Adopting the latest EASA Approval Format – Addition of C Rating, Component C21 (Water Ballast) & C22 (Propulsion)

8. Retention of AMO maintenance records from 2 to 3 years (CAR 145.55)

10. Redefining the AMC- Maintenance data must be available in close proximity to the aircraft being maintained & provision of suitable facility for maintenance personnel to study the data during maintenance.

11. AMO MOE Procedure on Reporting incident, Hazzard, events i.a.w – ROSI (CAR 145.65)

12. SMS - Mandatory compliance with CAR Part X by AMO (CAR 145.65)
CAR 145 Amendments

Significant Change:

1. CAR 145.1

Organisations involved in the maintenance of all aircraft registered in UAE in all categories of operations (except aircraft below 5700 kg Maximum take-off mass authorized in non commercial air transport), and components intended for fitment thereto, shall be approved in accordance with CAR145.

Unless maintained by CAR145 organisation, non commercial air transport category aircraft below 5700 kg MTOM shall comply with the requirement stipulated in CAR M Subpart F.

(Definition of Commercial Air Transport – Aircraft Operations involving the transport of passengers, cargo or mail for remuneration or hire. This term encompasses Air Transport Operators & Air Carriers - Refer CAR Part 1)
Significant Change:

AMC 145.20 Terms of approval

The following table identifies the ATA specification 100 chapter for the category C component rating.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>RATING</th>
<th>ATA CHAPTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>C21</td>
<td>Water Ballast</td>
<td>41</td>
</tr>
<tr>
<td>C22</td>
<td>Propulsion Augmentation</td>
<td>84</td>
</tr>
</tbody>
</table>

(AMC 145.20 Terms of approval)
CAR 145 Amendments

Significant Change:

AMC 145.25 Facility

In addition, as part of the office accommodation, aircraft maintenance staff should be provided with an area where they may study maintenance instructions and complete maintenance records in a proper manner.
CAR 145 Amendments

Significant Change:

**AMC 145.30(f) Personnel requirements (NDT)**

2. Appropriately qualified means to Level 1, 2 or 3 as defined by the European Standard 4179:2000 (EN 4179), MIL-STD-410E, ATA Specification 105, or any other equivalent standard acceptable to the GCAA dependant upon the NDT function to be carried out.

3. Any such personnel who intend to carry out and/or control a NDT test for which they were not qualified prior to the effective date of CAR 145 should qualify for such NDT in accordance with EN 4179, MIL-STD-410E, ATA Specification 105, or any other equivalent standard acceptable to the GCAA.
CAR 145 Amendments

Significant Change:

**CAR 145. 30 PERSONNEL**

Additional training in Fuel Tank Safety as well as associated inspection standards and maintenance procedures should be required for maintenance organisations’ technical personnel, especially technical personnel involved in the compliance of CDCCL tasks. (Appendix IV to AMC 145.30)

(FUEL Tank Training – App IV to AMC 145.30(e))
CAR 145 Amendments

**Significant Change:**

**AMC 145.65(b)(3) Safety & quality policy, maintenance procedures & quality system**

The maintenance organisation should ensure that when carrying out a modification, repair or maintenance, Critical Design Configuration Control Limitations are not compromised; this will require the development of appropriate procedures where necessary by the maintenance organisation. The maintenance organisation should pay particular attention to possible adverse effects of any wiring change to the aircraft, even a change not specifically associated with the fuel tank system.

- For example, it should be common practice to identify segregation of fuel gauging system wiring as a CDCCL.
- To prevent adverse effects associated with wiring changes by standardising maintenance practices through training, rather than by periodic inspection.
- Training should be provided to end indiscriminate routing and splicing of wire and to provide comprehensive knowledge of critical design features of fuel tank systems that would be controlled by a CDCCL.

Current guidance is provided for training to maintenance organization personnel.
CAR 145 Amendments

Significant Change:

AMC 145.70(a) Maintenance Organisation Exposition

The exposition should contain information, as applicable, on how the maintenance organization complies with Critical Design Configuration Control Limitation (CDCCL) instructions.
CAR 145 Amendments

Significant Change:

CAR 145.35 Certifying staff & category B1/B2 support staff

The organisation shall retain the record for at least three years after the staff referred in this paragraph have ceased employment with the organisation or as soon as the authorisation has been withdrawn. In addition, upon request, the maintenance organisation shall furnish staff referred to in this paragraph with a copy of their personal record on leaving the organisation.
Significant Change:

AMC 145.42(a) Acceptance of components (align with IB 02/2005)

An equivalent document to an AW Form 1 may be:

- A release document issued by an organization under the terms of a bilateral agreement signed by the Authority; or
- an EASA Form 1 issued by a Part 145 organization approved by an EASA member state.
- a JAA Form 1 issued prior to September 28, 2003; or
- a JAA Form One issued prior to 28 September 2005 by a production organisation approved by a competent authority in accordance with its national regulations.
- FAA Form 8130-3; or
- Transport Canada Form 24-0078; or
- Form issued by Type Certificate holder under Authority of the State of Design; or
- Any other equivalent certification acceptable to the Authority eg. Brazilian CAA ARC.
CAR 145 Amendments

Significant Change:

AMC 145.45(d) Maintenance Data

Important Note:

Critical Design Configuration Limitation (CDCCL) are airworthiness limitation. Any modification of the maintenance instructions linked to CDCCL constitutes aircraft modification that should be approved in accordance with CAR 21.
CAR 145 Amendments

CAR 145. 50 CERTIFICATION OF MAINTENANCE

(AW Form 1)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Part No.</th>
<th>Qty.</th>
<th>Serial No.</th>
<th>Status/Work</th>
</tr>
</thead>
</table>

1. Approving Competent Authority / Country

2. AUTHOURISED RELEASE CERTIFICATE

AW FORM 1

3. Form Tracking Number

4. Organisation Name and Address:

5. Work Order / Contract / Invoice

6. Remarks

7a. Certifies that the items identified above were manufactured in conformity to:
   a. approved design data and are in a condition for safe operation
   b. non-approved design data specified in block 12

7b. Authorised Signature

8. Approval / Authorisation Number

11a. CAR 145. 50 Release to Service

8a. Other regulation specified in block 12

8b. CAR 145 is accomplished in accordance with CAR 145 and in respect to that work the items are considered ready for release to service.

11b. Authorised Signature


12a. Date (dd/mm/yyyy)

12b. Name

13. Authorised Signature

13a. Approval / Authorisation Number


14a. Date (dd/mm/yyyy)

14b. Name
CAR 145 Amendments

Significant Change:

CAR 145.50  Certification of maintenance

(a) A certificate of release to service shall be issued by appropriately authorised certifying staff on behalf of the organisation when it has been verified that all maintenance ordered has been properly carried out by the organisation in accordance with the procedures specified in CAR 145.70, taking into account the availability and use of the maintenance data specified in CAR 145.45 and that there are no non-compliances which are known to endanger the flight safety.

Endangers the flight safety’ means any instances where safe operation could not be assured or which could lead to an unsafe condition. It typically includes, but is not limited to, significant cracking, deformation, corrosion or failure of primary structure, any evidence of burning, electrical arcing, significant hydraulic fluid or fuel leakage and any emergency system or total system failure. An airworthiness directive overdue for compliance is also considered a hazard to flight safety.
CAR 145 Amendments

Significant Change:

CAR 145.55 Maintenance records

(c) The organisation shall retain a copy of all detailed maintenance records and any associated maintenance data for three years from the date the aircraft or component to which the work relates was released from the organisation.

• Records under this paragraph shall be stored in a manner that ensures protection from damage, alteration, and theft.
CAR 145 Amendments

Significant Change:

AMC 145.60 (a) Occurrence Reporting (ROSI)

CAAP 22 Provides further guidance on occurrence reporting.

(CAAP 22)
CAR 145 Amendments

Significant Change:

CAR 145.65 Safety and quality policy, maintenance procedures and quality system

(b) As of 31st December 2010, the organization’s safety policy required by paragraph (a) shall be submitted to be the Authority in compliance with the requirements of Safety Management System established and implementation as specified in CAR PART X.

(CAAP 50 – Provides guidance materials)
Significant Change:

AMC 145.70(a) Maintenance Organisation Exposition

1.6 List of certifying staff and B1 and B2 support staff.
CAR 145 Amendments

Significant Change:

ANY QUESTIONS??

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Thank you