



EASA

European Aviation Safety Agency

AD Workshop

Continuing Airworthiness Organisations responsibilities

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Roles and responsibilities of Continuing Airworthiness Organisations (CAO)

- Part M

- Part 145

- Part 147



Continuing Airworthiness



Owner/
operator

CAMO

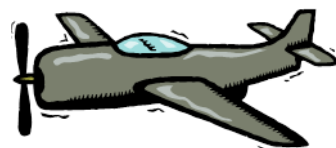


Maintenance



Pilot Owner
maintenance

Independent
certifying staff



Part-M
subpart-F

Part-145





M.A.201(a) (1)

The **owner/operator is responsible** for the continuing airworthiness of an aircraft and shall ensure that no flight takes place unless:
the aircraft is maintained in an airworthy condition, and....;

M.A.301 (5) (i)

The aircraft continuing airworthiness and the serviceability of both operational and emergency equipment shall be ensured by:....
the accomplishment of any **applicable** Airworthiness Directive



CAO Organisation Part M requirements

M.A.708(b)5

For every aircraft managed, the approved continuing airworthiness management organisation shall:

- ...
- ensure that all **applicable** AD's are applied,

M.A.303

Any **applicable** airworthiness directive must be carried out within the requirements of that airworthiness directive, unless otherwise specified by the Agency.



CAO Organisation Applicable AD's

- ADs issued by the Agency through Agency decisions,
- ADs issued by Foreign State of Design Authorities (Non-EASA Member States) and adopted by the Agency by way of:
 - for ADs issued before 28 September 2003 (start date of EASA):
[Commission Regulation \(EU\) No 748/2012](#), Article 3, Paragraph 1 (a) (iii)
(ADs issued by the State of Design for products, parts and appliances);
 - for ADs issued after 28 September 2003 (start date of EASA):
ED Decision 02/2003 on the implementation of airworthiness directives for products, parts and appliances designed in third countries.



WHAT DO WE EXPECT FROM AN APPROVED CAMO



CAMO Organisation

Airworthiness Directives Control

Effective procedures thru the approved CAME 1.4 which shall provide:

- Clear definition of applicable AD's for the types of aircraft under the CAMO management
- The description of the AD's receiving process, including emergency AD's
- The description of how and within which time the individual AD's shall be assessed for applicability to the types and in second instance to the aircraft serial numbers under CAMO management
- The description for the recording of the AD's in the CAMO planning tool and issuance of the related engineering instructions (including OPS, impact on stores, etc.)



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- The description of the AD's planning process:
This must include airframe, engine, APU, landing gear and components in general
- The description of the verification for actual AD's implementation, recording and follow up
- The description for the recording of the AD's implementation and establishment of next due



CAMO Organisation

Airworthiness Directives Control – typical Issues

- AD's complexity
- Incorrect use of continuing airworthiness software management tool, e.g. planning of AD's allowing exceedances
- Post implementation follow up:
 - a) Verification of correct implementation of the AD's as requested in the work order
 - b) Correct establishment of the next due, following the results of last AD's performance



Part-145 Organisation Airworthiness Directives

- EASA Part-145 regulation contains clear references to ADs and the level of responsibility assigned to the AMO is to be assessed, depending on:
 - work order received by the AMO
 - Organisation (AMO or operator) retaining airworthiness control of the components/engines
 - Scope of approval:
 - A rated (Aircraft maintenance)
 - B rated (engines/APUs)
 - C rated (components)

Should the AMO control the AD status of the aircraft/engine/component being maintained?



Part-145 Organisation Requirements

➤ Acceptance of components:

- 145.A.42(b) "Prior to installation of a component, the organisation shall ensure that the particular component is eligible to be fitted when different modification and/or **airworthiness directive** standards may be applicable"
- AMC 145.A.42.(b) "..... The receiving organisation should be satisfied that the component in question is in satisfactory condition..... Care should also be taken in ensuring compliance with applicable **airworthiness directives....**"



Part-145 Organisation Requirements

► Maintenance Data:

- 145.A.45(b) “.....maintenance data shall be...any **applicable airworthiness** directive....”
- AMC 145.A.45(b) “.....the maintenance organisation...should hold and use.....all applicable ...EASA airworthiness directives.....”



➤ Certification of Maintenance:

- 145.A.50(a) “.....A CRS shall be issuedwhen it has been verified that.....there are no non-compliances which are known to endanger flight safety”
- AMC 145.A.50(a) “.....An airworthiness directive overdue for compliance is also considered a hazard to flight safety”
- EASA Form 1, block 12 “remarks” to include:
 - “...Compliance with airworthiness directives”



Part-145 Organisation Requirements

- Nevertheless, the responsibility of the Part-145 AMO in the relation with the CAMO is:
 - 145.A.65(b): “.....ensure that a **clear work order** or contract has been agreed between the (Part-145) organisation and the organisation requesting maintenance **to clearly establish the maintenance to be carried out**”
 - GM 145.A.65(b)1: “.....the Part-145 organisationshould ensure that a clear contract or work order has been concluded before providing maintenance services”



Part-145 Organisation Requirements

- Appendix XI to AMC to M.A.708(c):
 - Contains basic principle for ADs implementation by the AMO
 - Specifically, par. 2.9 ADs/SBs/modifications:
 - » The contract should specify the information that the CAMO is responsible to provide to the AMO, such as.....the status of the ADs including due date and the selected means of compliance, if applicable; and
 - »the type of information the CAMO will need in return to complete the control of ADs.....



Part-145 Organisation

Typical Issues

- This means the AMO shall demonstrate:
 - Access to the relevant ADs
 - as necessary depending from AMO scope of approval
 - control on ADs applicable to components in store:
 - When the airworthiness control is by the CAMO
 - AMO to demonstrate a contract is in place, attributing the responsibilities related to the ADs to such owner/operator (discharging of responsibilities)
- OR**
- When the airworthiness control is by the AMO
 - AMO to ensure all applicable ADs are embodied to the parts they have in store



Part-145 Organisation

Typical Issues

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- a procedure to ensure that if an overdue AD is known/detected, the CRS will not be issued
- For maintenance on components/engines (Bx/Cx ratings) the EASA Form 1 should include AD compliance details:
 - particular attention following “overhaul”



Part-145 Organisation

Typical Issues

- Risk areas:
 - Components, including engines, managed outside the CAMO control (when off-wing)
 - Non regulated entities issuing work orders to AMO (i.e. parts distributors, non-EU operators, etc.)
 - AMO performing limited maintenance on the component (based on limited work order received)
- Final safety net is the CAMO in cooperation with the contracted maintenance provider at the time of installation on a/c



Part-147 Organisation Requirements

- ADs are considered when approving aircraft type training
- Appendix III to Part-66 "Aircraft Type Training" states:
 - Par. 3: "...theoretical and practical training....should be based on.....significant applicable ADs....."
- AMC to par. 3.1(d) regarding the TNA content
 - "typical documents to be used...to identify.....a need for training.....include.....ADs"
 - "The TNA is a living process and should be reviewed/updated based on.....ADs...."



Part-147 Organisation

Typical issues

- This means the type training AMTO needs to:
 - Have access to ADs
 - For initial a/c type course approval: assess the ADs as part of the TNA
 - Could affect theoretical and/or practical type training
 - Monitor the ADs for amending the type course
 - As part of the TNA monitoring process



Any questions ?



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European Aviation Safety Agency

Thank you!

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