EASA
European Aviation Safety Agency

Product Certification and Design Organisation Approval Workshop

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ICA in FAA validations

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FAA validations

- In validations, the AMM acceptance is handled by FAA through the standard Issue Paper M-01
- Whilst the ACO* has responsibility for accepting the ICA in accordance with FAA Order 8110.54A chapter 1 paragraph 2 the FAA Aircraft Evaluation Group (AEG) assists the ACO by recommending Acceptance of the ICA following a satisfactory review of the documents
- Often, problems are encountered at the AEG review leading to extensive AMM revisions.

** FAA standards staff branch (old Directorate) is responsible for ICAs for incoming Type Certificates*

Differences Licensing

- **Personnel Licensing Requirements & Standards Differ Significantly**
  - FAA Part 65
  - In general, airmen are individually certificated as Mechanics by the FAA under 14 CFR Part 65 Sub-part D. They may perform maintenance, preventive maintenance, inspection or alteration of an aircraft or appliance, or a part thereof, for which they are rated. Ratings available are Airframe and Powerplant with respective additional privileges. There are no further or higher licensing standards for maintenance personnel by the FAA. At this, the highest level, privileges extend to any category, class and type aircraft for performing almost any type of maintenance operation.
  - EASA Part 66
  - EASA has developed Part 66 to the Continued Airworthiness regulations. Part 66 specifies additional levels of ratings for maintenance personnel in the addition of Class or “Type” ratings for specific make, model and type aircraft. Additional type specific experience and type specific training are required for personnel to approve aircraft for return to service. The addition of an STC can impact the class/type rating structure.

Differences

- **For EASA under 21.A.61:**

ICA are allowed to be incomplete at the time of Type Certification as well as at the time of entry into service. Products with incomplete ICA will have a limitation that the Design Approval Holder (DOH) must make the missing portions available before any of the products reach the stated interval.

- **For FAA under 21.50(b) and (c):**

U.S. registered aircraft* for which a design approval is issued under 14 CFR Part 21 are not allowed entry into service without complete ICA.

Note: For an aircraft TC the engine and propeller ICA has to be complete and included.

Requirement for ICA

EASA

- CS 23.1529
- CS 23 Book 1 - Appendix G

FAA

- FAR 23.1529
- FAR 23 - Appendix G

At first glance, the standards appear to be identical. The key standards difference is the FAA requires ICAs to be accepted by the administrator (FAA). For incoming FAA validations, ICAs are identified as an SSD that is currently FAA retained.

Requirement for ICA (cont'd)

Why are ICAs an SSD for FAA incoming validations?

- FAA required to accept ICAs per 23.1529

  "…Appendix G to this Part that are acceptable to the Administrator …"

  Note: This language is not contained in CS 23.1529

- FAR G23.4 Requires Specific language for FAA

"The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§ 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved."

- Non- Harmonization of Maintenance and Operational regulations , i.e. FAR 65 vs. CS 66 (slide 3)
- Non-Harmonization of FAR 21.50 vs 21.A.61

FAA policies

Order 8110.54A, *Instruction for Continued Airworthiness*

- To show ACO* and AEG staffs how to review ICA and find their provisions acceptable, or approved, as appropriate.

*FAA standards staff branch for validation Type Certificates

Policy Statement, PS-AIR-21.50-01

- To help FAA employees determine whether DAH actions for distributing ICA meet the intent of (14 CFR) 21.50 (b), and to help DAHs determine whether their practices meet the intent of the CFR.

Check list

Order 8110.54A

The check list is developed to fulfil the requirements of Appendix G

Appendix A. Part 23 Airplane ICA Checklist

REQUIREMENT	Regulation Appendix	Location In ICA
( ) ICA for each aircraft engine.	G23.1(b)	
( ) ICA for each propeller.	G23.1(b)	
( ) ICA for each appliance required by this chapter.	G23.1(b)	
( ) Required information on the interface of ( ) appliances, ( ) aircraft engines, and ( ) propellers with the aircraft.	G23.1(b)	
( ) If ICA are not supplied by the manufacturer of an ( ) appliance, ( ) aircraft engine, or ( ) propeller installed on the aircraft, the ICA for the aircraft must include ( ) the information essential to the continued airworthiness of the aircraft.	G23.1(b)	
( ) Applicant's program showing how they or the manufacturers of products and appliances installed on the airplane will distribute changes to the ICA.	G23.1(c)	
( ) ICA in a manual or manuals. ( ) Manuals arranged for easy and practical use.	G23.2(a) G23.2(b)	
( ) Manuals prepared in English.	G23.3	
( ) Manuals must include introductory information explaining the airplane's features and data necessary for maintenance or preventive maintenance.	G23.3(a)(1)	
( ) Description of the ( ) aircraft and its systems and installations, ( ) aircraft engines and its systems and installations, ( ) propellers and its systems and installations, and ( ) appliances and its systems and installations.	G23.3(a)(2)	
( ) Basic control and operating information describing ( ) how the aircraft components and systems are controlled and ( ) how the aircraft components and systems are operated, including ( ) any special procedure and limitations.	G23.3(a)(3)	

Examples of unacceptable wording

In the ALS:

- Reference to a document's issue with "or later approved…"
- Wording like "it is recommended to…"
- Life limits based on operational conditions
- Inspections with no detailed procedures
- Putting maintenance recommendations in as ALS

In general:

- "as required"
- "check for play"
- "check for excessive wear"
- "check for correct installation"
- "Maintenance on the airplane must be conducted by an **approved Maintenance Organization**"
- "contact DAH for further instructions"

Unacceptable practices

- ALS that do not have related inspection procedures identified.
- ALS required inspection procedures that are referenced in other sections of the AMM are not clearly identified in those sections that they affect the ALS
- Requiring the owner/operator to only install DAH-produced or authorized replacement parts, articles, appliances, or materials.
- Requiring that alterations or repairs must be provided or otherwise authorized by the DAH.
- Requiring the use of only maintenance providers or other persons authorized by the DAH to implement the ICA.
- Establishing, or attempting to establish, any restriction on the owner/operator to disclose or provide the ICA to persons authorized by the FAA to implement the ICA.
- Incomplete ICA for product is not acceptable to FAA, so no TBD or IOU's. Clear procedures and practices, or references to such like AMM are required.

References

- 14 CFR Part 65 Licensing
- 14 CFR Part 43.10, .13, .16
- 14 CFR 21.50(b), 21.50(c) and 21.181(a)
- 14 CFR 23.1529 (App G23)

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Thank you for your attention!

Questions ?

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